INTENTIONALLY LEFT BLANK

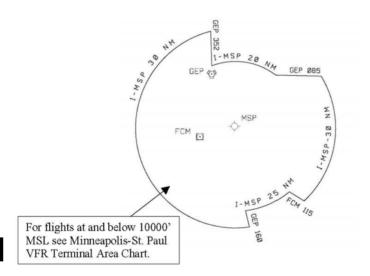
INTENTIONALLY LEFT BLANK

World Aeronautical Charts CF-17 and CF-18 Minneapolis, Minnesota, Class B Airspace

The 35th editions of World Aeronautical Charts CF-17, effective August 4, 2005, and CF-18, effective October 27, 2005, do not reflect revisions to the Minneapolis Class B Airspace Area that became effective on February 16, 2006.

The updated Minneapolis Class B Airspace Area will be shown on the 36th edition of World Aeronautical Chart CF-17, to be published on August 3, 2006, and the 36th edition of World Aeronautical Chart CF-18, to be published on October 26, 2006.

This Airspace Area is correctly depicted on the current editions of the Twin Cities, Green Bay, and Omaha Sectional Aeronautical Charts and the Minneapolis-St. Paul VFR Terminal Area Chart, all effective February 16, 2006. The graphic below depicts the updated Airspace Area.



PROHIBITED AREA P-49. CRAWFORD. TEXAS

In response to a request from the United States Secret Service, the FAA has established a prohibited area over President George W. Bush's ranch in Crawford, Texas. The prohibited area extends from the SFC up to 5,000' MSL within a 3 NMR of lat. N31°34'45", long. W97°32'00" (ACT242R/15).

Bomb Disposal Area McAlester, Oklahoma Vicinity

Bomb disposal area, one NM radius, MLC $240^{\circ}/006$, SFC to 2000 AGL. Times of use: Daily, 30 min after SR to 30 min before SS. Avoidance advised. For further information contact McAlester AFSS.

Springhill Airport (SPH), Springhill, LA

Aerobatic practice conducted at the Springhill (SPH) airport, from SFC to 5000 MSL, within the area defined as having its western boundary along the western edge of Rwy 18/36, extending northward 1000 feet beyond the north end of the runway; then eastward 150 feet to the eastern boundary; then southward parallel to the runway to a line which runs along the southern edge of Rwy 18/36, extending from its western edge 1500 feet to a point where it intersects the eastern boundary. For further information, contact DeRidder AFSS on 1–800–WX–BRIEF (992–7433).

Alpine, Texas

Aerobatic practice will be conducted within a rectangular area 3500 by 6000 feet, commencing from the Alpine–Casparis Municipal Airport (E38), extending Northeast and Southwest of Runway 05–23, from SFC to 9000 feet MSL, through April 30, 2007. For further information, contact San Angelo AFSS at 325–223–6041.

Celina, TX, Four Winds Ranch

Aerobatic flight activity will be conducted at Four Winds Ranch, bound on the north by County Road 102, on the south by an imaginary line parallel to and 800 feet south of County Road 134, on the west by an imaginary line just east of the three lakes, and on the east by a tree line, SFC to 4500 feet MSL, SR–SS until December 31, 2007. For further information contact Fort Worth AFSS on 1-800-992-7433.

West of Fredericksburg, TX

Aerobatic Flight activity will be conducted in an area within an approximate 1 NM radius of CSI 012/22, SFC to 5000 feet MSL. For further information contact San Angelo AFSS on 1–325–223–6006.

Georgetown (GTU). TX

Aerobatic flight activity will be conducted within 1 NMR of CWK 342/019, SFC to 4000' AGL. Pilots should use caution within this area. For further information, contact San Angelo AFSS on 1–325–223–6041.

Godley, TX, Aresti Aerodrome (TEO2)

Aerobatic flight activity will be conducted within 1 NM radius of the JEN VOR 034/042, SFC to 4,500 feet MSL, SR-SS, until January 1, 2008. For further information contact Fort Worth AFSS on 1–800–992–7433.

Gravson Ctv Arpt. Denison. TX (GYI)

Aerobatic flight activity will be conducted within a 2 NM radius of the BYP VOR 290/024.4, SFC to 5700 feet MSL, SR-SS daily. Pilots should use caution when operating in this area. For further information contact Fort Worth AFSS on 1–800–992–7433.

Hondo Muni (HDO), Hondo, TX

Aerobatic flight will be conducted in a 2 NM radius of Hondo Muni Airport. Flights will occur SR-SS, SFC to 3,500 AGL. Pilots should use caution when operating within this area. For further information, contact San Angelo AFSS, 325–223–6041.

Huber Airpark, Sequin, TX

Aerobatic flight will be conducted within an area 3300 feet by 3300 feet located on the SAT 089/25. Flights will occur SR-SS Sat/Sun, SFC to 4600 MSL. Pilots should use caution when operating in this area. For further information contact San Angelo AFSS on 1–325–223–6041.

Lubbock, TX, Biggin Hill Strip (TA67)

Aerobatic flight activity will be conducted within 1 NM radius of the LBB VOR 280/008, SFC to 6,500 feet MSL, SR-SS, until May 31, 2008. For further information contact Fort Worth AFSS on 1–800–992–7433.

CONTINUED ON NEXT PAGE

SPECIAL NOTICES

CONTINUED FROM PRECEDING PAGE

Naval Air Station JRB (NFW), Fort Worth, TX

Aerobatic practice will be conducted within 1 NM East and 3 NM West, North and South of NAS JRB Fort Worth (NFW) Rwy 17/35, from SFC to 6,000 MSL, SR-SS until April 30, 2008. For further information contact Fort Worth AFSS on 1–800–992–7433.

Navasota, TX

Aerobatic flight activity will be conducted within a 1 NM radius of TNV VOR 130/007, 800 feet to 3500 feet AGL, SR–SS daily. Pilots should use caution when operating within this area. For further information contact Montgomery County AFSS on 866–689–5992.

Glider operations will be conducted within a 5 NM radius of the TNV VOR 130/007, from SFC to 8000 feet MSL, SR-SS daily. Pilots should use caution when operating in this area. For further information, contact Montgomery County AFSS on 866-689-5092

O'Brien Airpark, Waxahachie, TX

Aerobatic flight practice will be conducted within 1½ NM radius of TTT 148/024 from SFC to 3500 MSL. Pilots should use caution when operating within this area. For further information contact Fort Worth AFSS on 1–800–992–7433.

Olney Muni (ONY), Olney, TX

Aerobatic flight activity will be conducted within a 4000' square area located over the Olney Muni airport property commencing from the west side of Rwy 17–35. Flights will occur SR–SS, SFC to 4,755' MSL through August 31, 2007. For further information contact Fort Worth AFSS on 817–429–6434.

Plainview. TX

Aerobatic flight activity will be conducted within a 1 NM radius of the PWW VOR 026/006, SFC to 7,500 feet MSL, SR-SS, through July 1, 2008. Pilots should use caution when operating in this area. For further information contact Fort Worth AFSS on 1-800-992-7433.

Possum Kingdom (F35), Graford, TX

Aerobatic practice will be conducted 3.5 NM west of Possum Kingdom Airport, within 1 NM radius of MQP 289/020, SFC to 4,000 feet AGL, SR–SS, through May 14, 2007. For further information contact Ft. Worth AFSS at 817–429–6434.

Randolph AFB, Seguin, TX

Aerobatic flight activity will be conducted in an area encompassing the entire Seguin Auxiliary Airfield located at RND R-072/20, SFC to 6000' AGL. Activity may occur daily, except holidays, sunrise to sunset through 31 March 2008. For further information, contact San Angelo AFSS, 325-223-6041.

Skywest Inc. Airport, Midland, TX

Aerobatic flight activity will be conducted within a 3300' by 3300' square box, located 1/4 mile south southeast of the approach end of Rwy 34 at Skywest airport, Midland, Texas. Flights will occur between sunrise and sunset, from the surface to 6,500 feet MSL.

Pilots should use caution when operating within this area. For further information, contact San Angelo AFSS, 325–223–6041.

Slidell, TX, Akroville Arpt (XA68)

Aerobatic flight activity will be conducted within a 1.5 NM radius of the UKW VOR 108/026, SFC to 4,000 feet MSL, SR-SS, until June 30, 2008. For further information contact Fort Worth AFSS on 1-800-992-7433.

CONTINUED ON NEXT PAGE

SPECIAL NOTICES

CONTINUED FROM PRECEDING PAGE

Songbird Airport, Friendswood, Texas

Aerobatic flight activity will be conducted within a 2 NM radius of the Houston Hobby VOR 185° radial at the 18 mile DME fix. Flight will occur from sunrise to sunset, from the surface to 3500 feet AGL. Pilots should use caution when operating within this area. For further information contact Montgomery County AFSS, 866–689–5992.

Stephens County Airport (BKD), Breckenridge, TX

Aerobatic flight activity will be conducted within a rectangular box west of Stephens County Rwy 17/35, east one mile and two miles in length, SFC to 4,000 feet AGL, SR–SS through August 31, 2007. Pilots should use caution when operating in | this area. For further information, contact Fort Worth AFSS on 1–800–992–7433.

Wichita Falls, TX

Aerobatic practice will be conducted within 1.5 NMR of SPS 200/07, from SFC to 4,500 MSL, SR-SS until April 30, 2008. For further information contact Fort Worth AFSS on 1–800–992–7433.

Zuehl Airport, Marion, Texas

Aerobatic flight activity will be conducted within a 4,000 foot square box, on the northeast side of Zuehl Airport, Marion, Texas, or 8 miles southeast of Randolph AFB. Flights will occur SR-SS, SFC to 4,000 feet AGL. Pilots should use caution when operating within this area. For further information, contact San Angelo AFSS, 1–325–223–6041.

MODEL AIRCRAFT ACTIVITY

Austin, TX

Model rocket launches will be conducted within a 1 NM radius of CWK 360/14.2 SFC to 16,000 feet MSL, 0700–1800 LCL, through August 31, 2007. For further information, contact San Angelo FSS at 325–223–6041.

Fort Stockton (FST), TX

Model rocket activity will be conducted within a 2.6 NM radius of FST 146/014, SFC to 20,000 MSL, SR-SS. For further information, contact San Angelo AFSS on 1–325–223–6041.

Model rocket activity will be conducted within a 2 NM radius of FST 212/9, SFC to 23,100 MSL, SR-SS. For further information, contact San Angelo AFSS on 1–325–223–6041.

Kileen (ILE), Texas, Vicinity

Model airplane activity conducted 1 NM radius ILE 138R/006NM, 1000' AGL and below. Intermittent launches daily. For further information contact San Angelo AFSS on 1-325-223-6041.

Stonewall (STV), TX

Model rocket activity will be conducted within a 1 NM radius of STV 268/15, SFC to 5,000 MSL and occasionally SFC to 8,000 MSL, 0800–1800 LCL, through March 17, 2007. For further information, contact San Angelo AFSS at 325–223–6041.

DALLAS-FORT WORTH, TX, DALLAS/FORT WORTH INTL AIRPORT (DFW) NOISE ABATEMENT PROCEDURES

Successive or simultaneous departures from Runways 17R, 17C, 18R, 18L, 35L, 35C, 36L and 36R are authorized, with course divergence beginning within 5 miles from the departure end of parallel runways, due to noise abatement restrictions.

DFW INTERNATIONAL AIRPORT LAND AND HOLD SHORT OPERATIONS

DFW is authorized to instruct aircraft to land on a runway and hold short of an intersecting taxiway while aircraft/vehicles simultaneously taxi across the runway at beyond the hold–short point for the following runway/taxiway combinations.

| 18R | AND | TAXIWAY B | 10,100 feet |
|-----|-----|------------|-------------|
| 17C | AND | TAXIWAY B | 10,460 feet |
| 35C | AND | TAXIWAY EJ | 9,050 feet |
| 36L | AND | TAXIWAY Z | 10.650 feet |

These procedures are governed by the following conditions and limitations:

- a. The tailwind on the hold short runway shall be calm (less than 3 knots).
- b. A statement that simultaneous landings and runway crossings are being conducted shall be included on the ATIS.
- c. LAHSO wet runway operations are authorized provided pilot reported braking action is not less than good, the runway is not classified as contaminated by the airport operator, and the hold short position lights are operational and "on".
 - d. The weather conditions must be at or greater than ceiling 1,000 feet, and visibility 3 miles.
- e. Traffic information shall be exchanged and a readback shall be obtained from the landing aircraft with a LAHSO clearance. An acknowledgment shall be received from the crossing aircraft/vehicle.
- f. Operations beyond the hold short point except for runway crossings are not authorized during LAHSO.
- g. Hold short markings, taxiway identification signs, and in-pavement lights will be used to identify the hold-short points. The lighting system consists of six or seven in-pavement white lights, flashing/pulsing simultaneously, arranged in a line across the landing runway perpendicular to the runway centerline.

The safety and operation of an aircraft remain the responsibility of the pilot. A pilot must inform air traffic control if the full length of the runway or another runway is desired. The runway distance from the landing threshold to the hold short point will be provided to the pilot upon request.

h. Vertical guidance required for LAHSO (Glideslope, VASI, PAPI).

INTERSECTION DEPARTURES DURING PERIODS OF DARKNESS DALLAS-FORT WORTH INTERNATIONAL AIRPORT (DFW) DALLAS-FORTH WORTH. TEXAS

Dallas–Fort Worth Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 17R at Taxiway Yankee Runways 17R/C and 18R/L at Taxiway Zulu Runway 18L at Taxiway Yankee Runways 35L/C and 36L/R at Taxiway Alpha Runways 35L/C and 36L/R at Taxiway Bravo Runway 13L at Taxiway Papa

Runway 31L at Taxiway "A5"

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Simultaneous taxi into position and hold are not authorized on the same runway. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance

SPECIAL NORTH ATLANTIC, CARIBBEAN AND PACIFIC AREA COMMUNICATIONS

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area: 123.45 MHz
Caribbean area: 123.45 MHz
Pacific area: 123.45 MHz

ALBUQUERQUE ARTCC VFR Services South of El Paso. Texas

VFR radar advisory service and merging target service available to transponder equipped aircraft above 10,000 feet MSL from a point 75 miles south of El Paso, Texas, to the U.S./Mexican border.

CAUTION—HIGH DENSITY STUDENT FLYING Little Rock AFB, AR

High density student flying training in the vicinity of Little Rock AFB and on low level Slow Routes (SR) within Arkansas; 0600–0200 Mon–Fri, occasional weekend. Extensive use of All American Drop Zone, Little Rock VORTAC 332° radial 15.0 NM, and Blackjack Drop Zone, Little Rock VORTAC 009° radial 33.0 NM; 0600–0200, Mon–Fri, occasional weekend. Drop Zones are used for personnel and cargo, including IMC (AWDS) drops. For further information, contact Little Rock AFB, Base Operations, on 1–501–988–6125.

CAUTION—VERTICAL LIGHTS ON BUILDING Downtown Tulsa, Oklahoma

Approximately ten miles southwest of Tulsa International Airport in the area of downtown Tulsa, four 4,000-watt xenon lights are mounted on each corner of the roof of a 40-story building. Illumination is vertical and hours of use are daily, dusk to midnight.

BAYOU SAUVAGE NATIONAL WILDLIFE REFUGE. LA

Request aircraft remain at or above 2,000 ft in the vicinity of Bayou Sauvage National Wildlife Refuge bounded by Lake Pontchartrain to the Northwest and Northeast, Lake Borgue to the Southeast and New Orleans to the Southwest.

CAUTION-LARGE CONCENTRATION OF BATS San Antonio, Texas, Vicinity

From April to October large concentration of bats are observed in the vicinity of Braken Cave located 5.5 miles east of SAT VORTAC. Most activity is observed around sunset and sunrise at altitudes up to 10,000 feet.

U.S. SPECIAL CUSTOMS REQUIREMENT

Air Commerce Regulations of the Treasury Department's Customs Service require all private aircraft arriving in the U.S. from a foreign place in the Western Hemisphere, (a) south of 33 degrees north latitude which cross into the U.S. over a point on the U.S./Mexican border between 97 and 120 degrees west longitude, or (b) south of 31 degrees north latitude which enter the U.S. via the Gulf of Mexico and Atlantic Coasts, to provide notice of intended arrival to the Customs Service at least one hour prior to crossing the U.S./Mexican border or the U.S. coastline. This notice may be provided by: (1) radio through an appropriate FAA Flight Service Station, (2) normal FAA flight plan notification procedures (a flight plan filed in Mexico does not meet this requirement due to unreliable relay of data), or (3) directly to the District Director of Customs or other Customs officer at place of first intended landing. Unless an exemption has been granted by Customs, private aircraft are required to make first landing in the U.S. at one of the following designated airports nearest to the point of border or coastline crossing:

Brownsville International, Corpus Christi International, Del Rio International, Eagle Pass Airport, El Paso International, Hobby Airport, Jefferson County Airport, Laredo International, Miller International, or Presidio–Ley International in Texas; Calexico International, or Brown Field in California; Bisbee Douglas International, Nogales International, Tuscon International, or Yuma International in Arizona; Las Cruees Intl in New Mexico; Lakefront or New Orleans Intl (Moisant Field) in Louisiana; Fort Lauderdale Executive, Fort Lauderdale–Hollywood International, Key West Airport, Miami International, Opa–Locka Airport, St. Lucie County International, Tampa International, or West Palm Beach Airport in Florida.

CAUTION-HIGH DENSITY AIR TRAFFIC AREA

Heavy helicopter and seaplane traffic exists over the Gulf of Mexico and adjacent onshore areas. Thousands of operations per month occur in this area in support of oil drilling and exploration.

Itinerant pilots traversing this area should familiarize themselves with offshore operating practices and frequencies through contact with the pertinent Flight Standards District Office (FSDO) or Flight Service Station.

MILITARY TRAINING ROUTES

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

CIVIL USE OF MILITARY FIELDS:

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission.

Army Installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

AIRCRAFT LANDING RESTRICTIONS

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

FEDERAL AVIATION REGULATION 91.713

The provisions of FAR 91.713 will apply as follows:

Air traffic clearances to aircraft of Cuban registry not engaged in scheduled International Air Service in U.S. airspace will require that the flight plan be filled with appropriate authorities at least five days prior to the proposed departure time. Route changes while en route will normally not be authorized. The procedures set forth herein do not apply at this time to overflights by aircraft of Cuban registry engaged in scheduled International Air Service.

CONTROLLED FIRING

Camden, Harrell Fld, AR

6E Camden 2 NM radius surface-005 avoidance advised Mon-Fri daylight hours.

El Dorado, South Arkansas Rgnl

ELD 021/024 2 NM radius surface—500 AGL avoidance advised Mon–Fri daylight hours.

Texarkana Rgnl Webb Fld, AR.

.25 NM radius TXK 223010 2000/blo Mon-Thu. 1900-0500Z‡

.5 NM radius TXK 240014 1000/blo Mon-Sat SR-SS.

Camp Bullis Training Site Controlled Firing Area (CTA) Camp Bullis, TX

1. CFA Description:

a. Boundaries: Beginning at

Lat. 29°41′10.07′N., Long. 98°31′41.40″W. to

Lat. 29°40′25.05″N., Long. 98°33′57.40″W. to

Lat. $29^{\circ}39'20.22''N.$, Long. $98^{\circ}34'44.18''W.$ to

Lat. 29°38'03.77"N., Long. 98°34'13.26"W. to

Lat. $29^{\circ}37'53.94''N.$, Long. $98^{\circ}33'46.90''W.$ to

Lat. 29°38′36.77″N., Long. 98°31′55.13″W. to

Lat. 29°39′48.07″N., Long. 98°31′06.07″W. to

Point of beginning.

- b. Altitudes: Surface to 3,000 feet AGL.
- c. Times of use: Approximately 70 times per year. Utilization will normally be 7 days per week, 0700–2300 local time. Give prior notice of all activities to the San Angelo Automated Flight Service Station (AFSS). Notify the AFSS when activities are terminated each day.

2. Activities:

- a. M203 40mm Grenade Launcher, HE/Target Practice Training (TPT) rounds, average use 50 times per year.
- b. Heavy Demolitions Range, types of explosives will vary, but all are conventional (no nuclear, biological, or chemical), 20 times per year.
 - c. Emergency destruction of illegal explosive devices will be unscheduled due to the nature of the event.
- 3. Using Agency: U.S. Army, Commander, Camp Bullis Training Site, Camp Bullis, TX
- 4. Effective date: The effective date is February 1, 2004. Biannual approval of the CFA is automatic upon receipt of a biannual status report from the Department of the Army Regional Representative containing a statement that the activities for which the area was established have not changed.
- 5. Conditions, Operating Limitations, and Safety Precautions:
- a. Camp Bullis Training Site will maintain observers with direct communications to the Range Towers located in positions that allow for sufficient visual surveillance of the entire area.
 - b. Firing will cease upon observation of low-flying aircraft.
 - c. The ceiling shall be at least 1,000 feet above the maximum ordinate of projectiles and/or debris.
- d. Visibility shall be sufficient to maintain visual surveillance of the entire CFA plus a distance of 5 statute miles beyond the CFA in all directions.
- e. All user responsibilities, precautionary measures, and surveillance requirements listed in FAA Order 7400.2 shall be complied with.
 - f. All activities will be contained within the designated impact area at Camp Bullis.
- 6. With the exception of the emergency destruction of unsafe explosive devices, the following information shall be filed with the San Angelo AFSS in sufficient time to permit a NOTAM to be transmitted at least 2 hours prior to scheduled operations:
 - a. Location of the CFA.
 - b. Time of use.
 - c. Activity to be conducted
 - d. Maximum altitudes.
 - e. User.
- 7. Any violation of the conditions, as outlined above, shall be the basis for the FAA to withdraw authorization of the CFA.

CONTROLLED FIRING AREA CAMP STANLEY, SAN ANTONIO, TEXAS

The Military has established a controlled firing area bordered by the following geographic coordinates: beginning at N29°40′37″/W98°37′53″; thence to N29°41′17″/W98°35′49″; to N29°43′51″/W98°35′50″; to N29°43′51″/W98°37′23″; to point of beginning. Operating SR–SS daily, SFC to 1,500 feet AGL (2,500 feet MSL). For further information contact San Angelo AFSS on 1–325–223–6041.

CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

- 1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
- 2. Wind Measuring Capability
- 3. Approach Light System (ALS) or Short ALS (SALS)
- 4. Ceiling Measuring Capability
- 5. Touchdown Zone Lighting (TDZL)
- 6. Centerline Lighting (CL)
- 7. Runway Visual Range (RVR)
- 8. High Intensity Runway Lighting (HIRL)
- 9. Taxiway Lighting
- 10. Apron Light (Perimeter Only)

The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

| Airport/Ident | Runway No. | Airport/Ident | Runway No. |
|-----------------------------|------------|--------------------------|------------|
| Albuquerque, NM (ABQ) | 08 | Milwaukee, WI (MKE) | 01L |
| Andrews AFB, MD (ADW) | 01L | Minneapolis, MN (MSP) | 30L |
| Atlanta, GA (ATL) | 09R | Nashville, TN (BNA) | 02L |
| Baltimore, MD (BWI) | 10 | New Orleans, LA (MSY) | 10 |
| Bismarck, ND (BIS) | 31 | New York, NY (LGA) | 22 |
| Boise, ID (BOI) | 10R | Newark, NJ (EWR) | 04R |
| Boston, MA (BOS) | 04R | Oklahoma City, OK (OKC) | 35R |
| Charlotte, NC (CLT) | 36L | Omaha, NE (OMA) | 14R |
| Chicago, IL (ORD) | 14R | Ontario, CA (ONT) | 26L |
| Cincinnati, OH (CVG) | 36L | Philadelphia, PA (PHL) | 09R |
| Cleveland, OH (CLE) | 06R | Phoenix, AZ (PHX) | 08R |
| Dallas/Fort Worth, TX (DFW) | 17C | Pittsburgh, PA (PIT) | 10L |
| Denver, CO (DEN) | 35L | Reno, NV (RNO) | 16R |
| Des Moines, IA (DSM) | 31 | Salt Lake City, UT (SLC) | 34L |
| Detroit, MI (DTW) | 03L | San Antonio, TX (SAT) | 12R |
| El Paso, TX (ELP) | 22 | San Diego, CA (SAN) | 09 |
| Great Falls, MT (GTF) | 03 | San Francisco, CA (SFO) | 28R |
| Houston, TX (IAH) | 26L | Seattle, WA (SEA) | 16R |
| Indianapolis, IN (IND) | 05L | St. Louis, MO (STL) | 30R |
| Jacksonville, FL (JAX) | 07 | Tampa, FL (TPA) | 36L |
| Kansas City, MO (MCI) | 19R | Tulsa, OK (TUL) | 35R |
| Los Angeles, CA (LAX) | 24R | Washington, DC (DCA) | 01 |
| Memphis, TN (MEM) | 36L | Washington, DC (IAD) | 01R |
| Miami, FL (MIA) | 09L | Wichita, KS (ICT) | 01L |
| | | | |

NOTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

NATURAL GAS FLARE CARLSBAD/CAVERN CITY, NEW MEXICO

A natural gas flare is located at approximately N32–27–50.5/W104–34–24.2 (CNM 300/021), SFC to 4200 feet MSL. Pilots should use caution when operating in this area. For further information, contact Albuquerque AFSS on 1–505–243–7831.

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY. LAGUARDIA. AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93–1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at http://www.faa.gov. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll–free telephone number for accessing e–CVRS is 1–800–875–9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll–free areas may access e–CVRS by calling the toll number of 703–707–0568. The Internet web address for accessing the e–CVRS is http://www.fly.faa.gov/ecvrs. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904–4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904–4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e–CVRS.

FAA AND NWS Telephone Numbers

Flight Service Station (FSS) numbers provide direct contact with an FAA pilot weather briefer.

Telephone Information Briefing Service (TIBS) provides continuous recordings of meteorological and/or aeronautical information including area and/or route briefings, airspace procedures and special announcements. A touch-tone telephone is required to fully utilize this service.

<u>Transcribed Weather Broadcast</u> telephone numbers (TEL-TWEB) provide access to the transcribed weather broadcast on selected navigational facilities.

National Weather Service (WS) numbers will connect you with a national weather service pilot briefer.

National AFSS Telephone Numbers are provided for direct contact with that AFSS from anywhere in the U.S. and certain areas outside the U.S.

Further information can be found in the Aeronautical Information Manual, Chapter 7.

Numerous additional telephone numbers are listed under COMMUNICATIONS in the A/FD tabulation. If you wish to call an FSS, but do not have access to a directory listing, call the toll-free number, 1–800–555–1212.

FAST FILE FLIGHT PLAN SYSTEM

Some flight service stations have inaugurated this system for pilots who already have obtained a weather briefing and desire only to file a flight plan. Pilots may call the discrete telephone numbers listed and file flight plans in accordance with recorded taped instructions. IFR flight plans will be extracted and entered in the appropriate ARTCC computer. VFR flight plans will be retained at the FSS for activation by the pilot. This equipment is designed to automatically disconnect after 8 seconds of no transmission, so pilots are instructed to speak at a normal speech rate without lengthy pauses between flight plan elements. Pilots are urged to file flight plans into this system at least 30 minutes in advance of proposed departure.

Araa

- ★ TIBS
- **■** TWEB
- ◆ Restricted Number for Aviation Weather Information

§§ Fast File (Flight Plan Filing Only)

National AFSS Numbers

| Location and Identifier | ARKANSAS | Area Code | Telephone |
|--|-----------|--------------|-----------------------------|
| Jonesboro JBRFSS AFSS | | (870) | 935–3471 1–866–520–8890# |
| Clearance Delivery Only | | | (TF 1-800-544-1710) |
| Elsewhere in Arkansas | | | (TF 1-800-WX-BRIEF) |
| Outside of Arkansas | LOUISIANA | | (TF 1-866-520-8890) |
| DeRidder (Beauregard Parish)FSS | | (337) | 462-6101 |
| AFSS | | | 1-866-401-5659# |
| Elsewhere in LouisianaFSS | | | 1-800-WX-BRIEF* |
| 211-Louisiana Area ForecastFSS | | | 1-800-WX-BRIEF* |
| 212-Louisiana Aviation Routine Weather | | | 1-800-WX-BRIEF* |
| Reports (METAR)FSS | | | |
| 213-BTR, LFT, LCH, MSY Aerodrome | | | 1-800-WX-BRIEF* |
| ForecastsFSS | | | |
| 214-AEX, MLU, SHV Aerodrome | | | 1-800-WX-BRIEF* |
| ForecastsFSS | | | |
| 215-SE Louisiana Area SummaryFSS | | | 1-800-WX-BRIEF* |
| 216-SW Louisiana Area SummaryFSS | | | 1-800-WX-BRIEF* |
| 217-Central Louisiana Area | | | 1-800-WX-BRIEF* |
| SummaryFSS | | | |
| 218-Northern Louisiana Area | | | 1-800-WX-BRIEF* |
| SummaryFSS | | | |
| 219-Coastal Waters Forecast Pensacola | | | 1-800-WX-BRIEF* |
| to GalvestonFSS | | | |
| 220-Tropical Storm and/or Hurricane | | | 1-800-WX-BRIEF* |
| InformationFSS | | | |
| 221-Special AnnouncementsFSS | | | 1-800-WX-BRIEF* |
| 222-Airspace ProceduresFSS | | | 1-800-WX-BRIEF* |
| | | | 1-800-523-3152§§ |
| | | | |

| Location and Identifier | NEW MEXICO | Area Code | Telephone |
|---|------------|--------------|------------------------------------|
| Albuquerque ABQ | | | |
| (Intl Sunport/Kirtland) INWATS AFSS | | | 1-800-WX-BRIEF 1-866-449-5390# |
| New Mexico | | (505) | 243–7831★ |
| CLNC DEL ONLYFSS | OKLAHOMA | | 1-800-525-9964 |
| McAlester MLCFSS AFSS | | (918) | 426-4110 1-866-269-0189# |
| Local AreaFSS FSS | | | 426-4870§§ 423-2444★ |
| CLNC DEL ONLYFSS (Oklahoma toll free INWATS)FSS | | | 1–800–722–4229 1–800–WX–BRIEF |
| | TEXAS | | 1-800-722-4447§§ |
| Far West Texas | | | |
| CLNC DEL ONLYFSS | | | 1-800-342-7835 |
| Fort Worth FTW (Fort Worth Meacham | | | 1–800–342–7633 1–800–WX–BRIEF |
| Intl)FSS | | | 1 000 WA BRIEF |
| AFSS | | | 1-866-272-7915# |
| METROPLEXFSS FSS | | (817) | 429–6434 |
| 50 NM radius Dallas-Fort WorthFSS | | | |
| CLNC DEL ONLYFSS | | | 1-800-722-6208 |
| Montgomery Co (Conroe)FSS | | (936) | 760–4206 |
| AFSS | | | 1-866-689-5992# |
| FSS | | (936) | 760-4205§§ |
| CLNC DEL ONLYFSS | | | 1-800-833-5602 |
| Southeast-TexasFSS | | | 1-800-WX-BRIEF◆ |
| From area codes 409 and 713FSS | | (005) | 1-800-833-0050§§ |
| San Angelo SJT (Mathis)FSS | | (325) | 944–9315♦ |
| AFSS CLNC DEL ONLYFSS | | | 1-866-300-3867# |
| | | | 1-800-433-8101 |
| Southwest TexasFSS 50 NM radius AustinFSS | | | 1-800-WX-BRIEF◆ |
| | | | 1-800-433-8103★ 1-800-433-8105★ |
| 50 NM radius Corpus ChristiFSS 50 NM radius HarlingenFSS | | | 1-800-433-8105★ |
| 50 NM radius San AntonioFSS | | | 1-800-433-8106★ |
| Waco ACTWS | | (817) | 754-8353♦ |
| Waco Ac1W5 | | (011) | 754-6353▼ |

372 FAA AND NWS

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

TAF KPIT 091730Z 091818 15005KT 5SM HZ.FEW020 WS010/31022KT FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA OVC008CB

FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

METAR KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB 18/16 A2992 RMK SLP045 T01820159

| Explanation | Report |
|---|--|
| Message type: <u>TAF</u> -routine or <u>TAF AMD</u> -amended forecast, <u>METAR</u> -hourly, <u>SPECI</u> -special or <u>TESTM</u> -non-commissioned ASOS report | METAR |
| ICAO location indicator | KPIT |
| Issuance time: ALL times in UTC "Z", 2-digit date, 4-digit time | 091955 Z |
| Valid period: 2-digit date, 2-digit beginning, 2-digit ending times | |
| In U.S. METAR : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on | COR |
| Wind: 3 digit true-north direction, nearest 10 degrees (or <u>VaRiaBle</u>); next 2-3 digits for speed and unit, <u>KT</u> (KMH or MPS); as needed, <u>G</u> ust and maximum speed; 00000KT for calm; for METAR , if direction varies 60 degrees or more, <u>V</u> ariability appended, e.g. 180 <u>V</u> 260 | 22015G25KT |
| Prevailing visibility: in U.S., Statute Miles & fractions; above 6 miles in TAF Plus6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction) | 3/4SM |
| Runway Visual Range: R; 2-digit runway designator Left, Center, or Right as needed; "/"; Minus or Plus in U.S., 4-digit value, FeeT in U.S., (usually meters elsewhere); 4-digit value Variability 4-digit value (and tendency Down, Up or No change) | R28L/2600FT |
| Significant present, forecast and recent weather: see table (on back) | TSRA |
| Cloud amount, height and type: SKy Clear 0/8, FEW >0/8-2/8, SCaTtered 3/8-4/8, BroKeN 5/8-7/8, OVerCast 8/8; 3-digit height in hundreds of ft; Towering CUmulus or CumulonimBus in METAR; in TAF, only CB. Vertical Visibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated METAR reports only, CLeaR for "clear below 12,000 feet" | OVC010CB |
| Temperature: degrees Celsius; first 2 digits, temperature "/" last 2 digits, dew-point temperature; Minus for below zero, e.g., M06 | 18/16 |
| Altimeter setting: indicator and 4 digits; in U.S., A-inches and hundredths; (Q-hectoPascals, e.g., Q1013) | A2992 |
| | Message type: TAF-routine or TAF AMD-amended forecast, METAR-hourly, SPECI-special or TESTM-non-commissioned ASOS report ICAO location indicator Issuance time: ALL times in UTC "Z", 2-digit date, 4-digit time Valid period: 2-digit date, 2-digit beginning, 2-digit ending times In U.S. METAR: CORrected ob; or AUTOmated ob for automated report with no human intervention; omitted when observer logs on Wind: 3 digit true-north direction, nearest 10 degrees (or VaRiaBle); next 2-3 digits for speed and unit, KT (KMH or MPS); as needed, Gust and maximum speed; 00000KT for calm; for METAR, if direction varies 60 degrees or more, Variability appended, e.g. 180V260 Prevailing visibility: in U.S., Statute Miles & fractions; above 6 miles in TAF Plus6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction) Runway Visual Range: R; 2-digit runway designator Left, Center, or Right as needed; "/"; Minus or Plus in U.S., 4-digit value, FeeT in U.S., (usually meters elsewhere); 4-digit value Variability 4-digit value (and tendency Down, Up or No change) Significant present, forecast and recent weather: see table (on back) Cloud amount, height and type: SKy Clear 0/8, FEW >0/8-2/8, SCaTtered 3/8-4/8, BroKeN 5/8-7/8, OVerCast 8/8; 3-digit height in hundreds of ft; Towering CUmulus or CumulonimBus in METAR; in TAF, only CB. Vertical Visibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated METAR reports only, CLeaR for "clear below 12,000 feet" Temperature: degrees Celsius; first 2 digits, temperature "/" last 2 digits, dew-point temperature; Minus for below zero, e.g., M06 Altimeter setting: indicator and 4 digits; in U.S., A-inches and |

FAA AND NWS 373

KEY to AERODROME FORECAST (TAF) and **AVIATION ROUTINE WEATHER REPORT** (METAR)

| Forecast | Explanation | Report |
|---------------|--|----------------------------|
| WS010/31022KT | In U.S. TAF , non-convective low-level (≤2,000 ft) <u>Wind Shear</u> ; 3-digit height (hundreds of ft); "/"; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u> | · |
| | In METAR , <u>ReMarK</u> indicator & remarks. For example: <u>Sea-Level Pressure</u> in hectoPascals & tenths, as shown: 1004.5 hPa; <u>Temp/dew-point</u> in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C | RMK SLP045 T01820159 |
| FM1930 | <u>FroM</u> and 2-digit hour and 2-digit minute beginning time: indicates significant change. Each FM starts on new line, indented 5 spaces. | |
| TEMPO 2022 | TEMPOrary: changes expected for < 1 hour and in total, < half of 2-digit hour beginning and 2-digit hour ending time period | |
| PROB40 0407 | PROBability and 2-digit percent (30 or 40): probable condition during 2-digit hour beginning and 2-digit hour ending time period | |
| BECMG 1315 | BECoMinG: change expected during 2-digit hour beginning and 2-digit hour ending time period | |

Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.

| QUALIFIER | | | | | | |
|-----------|-------------------|----------------------------------|------|---------------------|-------|-------------------------|
| Intens | ity or Proximity | • | | | | |
| | ght | "no sign" Moderate | | | | |
| | | at aerodrome; in U.S. M | | | | |
| | observation; in l | J.S. TAF , 5 to 10SM fror | n ce | nter of runway comp | lex (| elsewhere within 8000m) |
| Descri | iptor | | | | | |
| MI | Shallow | BC Patches | PR | Partial | TS | Thunderstorm |
| BL | Blowing | SH Showers | DR | Drifting | FΖ | Freezing |
| WEA. | THER PHENO | OMENA | | | | |
| Precip | itation | | | | | |
| | Drizzle | RA Rain | SN | Snow | | Snow grains |
| IC I | lce crystals | PL Ice pellets | | Hail | GS | Small hail/snow pellets |
| | | itation in automated obs | erva | tions | | |
| 1 | ıration | | | | | |
| | Mist (≥5/8SM) | | | Smoke | VA | Volcanic ash |
| SA | Sand | HZ Haze | PΥ | Spray | DU | Widespread dust |
| Other | | | | | | |
| | | | | Duststorm | PO | Well developed |
| FC | Funnel cloud | +FC tornado/waterspout | | | | dust/sand whirls |

- Explanations in parentheses "()" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- NWS **TAFs** exclude turbulence, icing & temperature forecasts; NWS **METARs** exclude trend fcsts Although not used in US, <u>Ceiling And Visibility OK</u> replaces visibility, weather and clouds if: visibility ≥10 km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

UNITED STATES DEPARTMENT OF COMMERCE NOAA/PA 96052 National Oceanic and Atmospheric Administration—National Weather Service

FAA AND NWS KEY AIR TRAFFIC FACILITIES

Air Traffic Control System Command Center

Main Number......703–904–4400

| RGNL AIR TRAFFIC DIVISIONS | | |
|----------------------------|--------------|--|
| REGION TELEPHONE | | |
| Alaskan | 907-271-5464 | |
| Central | 816-329-2500 | |
| Eastern | 718-553-4502 | |
| Great Lakes | 847-294-7202 | |
| New England | 781-238-7500 | |
| Northwest Mountain | 425-227-2500 | |
| Southern | 404-305-5500 | |
| Southwest | 817-222-5500 | |
| Western Pacific | 310-725-6500 | |

AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

| ARTCC NAME | *24 HR RGNL DUTY OFFICE TELEPHONE # | BUSINESS Hours | BUSINESS TELEPHONE # |
|----------------|---|-------------------|-------------------------|
| Albuquerque | 817-222-5006 | 7:30 a.m4:00 p.m. | 505-856-4300 |
| Anchorage | 907-271-5936 | 7:30 a.m4:00 p.m. | 907-269-1137 |
| Atlanta | 404-305-5180 | 7:30 a.m5:00 p.m. | 770-210-7601 |
| Boston | 617-238-7001 | 7:30 a.m4:00 p.m. | 603-879-6633 |
| Chicago | 847-294-8400 | 8:00 a.m4:00 p.m. | 630-906-8221 |
| Cleveland | 847-294-8400 | 8:00 a.m4:00 p.m. | 440-774-0310 |
| Denver | 425-227-1389 | 7:30 a.m4:00 p.m. | 303-651-4100 |
| Ft. Worth | 817-222-5006 | 7:30 a.m4:00 p.m. | 817-858-7503 |
| Houston | 817-222-5006 | 7:30 a.m4:00 p.m. | 723-230-5300 |
| Indianapolis | 847-294-8400 | 8:00 a.m4:00 p.m. | 317-247-2231 |
| Jacksonville | 404-305-5180 | 8:00 a.m4:30 p.m. | 904-549-1501 |
| Kansas City | 816-329-3000 | 7:30 a.m4:00 p.m. | 913-254-8500 |
| Los Angeles | 661-265-8200 | 7:30 a.m4:00 p.m. | 661-265-8200 |
| Memphis | 404-305-5180 | 7:30 a.m4:00 p.m. | 901-368-8103 |
| Miami | 404-305-5180 | 7:00 a.m3:30 p.m. | 305-716-1500 |
| Minneapolis | 847-294-8400 | 8:00 a.m4:00 p.m. | 612-713-4000 |
| New York | 718-995-5426 | 8:00 a.m4:40 p.m. | 516-468-1001 |
| Oakland | 310-643-3200 | 6:30 a.m3:00 p.m. | 510-745-3331 |
| Salt Lake City | 425-227-1389 | 7:30 a.m4:00 p.m. | 801-320-2500 |
| Seattle | 425-227-1389 | 7:30 a.m4:00 p.m. | 253-351-3500 |
| Washington | 718-995-5426 | 8:00 a.m4:30 p.m. | 703-771-3401 |

MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONS)

| TRACON NAME | *24 HR RGNL DUTY OFFICE TELEPHONE # | BUSINESS Hours | BUSINESS TELEPHONE # |
|------------------|---|-------------------|-------------------------|
| Atlanta | 404-305-5180 | 7:00 a.m3:30 p.m. | 404-669-1200 |
| Chicago | 847-294-8400 | 8:00 a.m4:00 p.m. | 847-608-5509 |
| Dallas/Ft. Worth | 817-222-5006 | 7:30 a.m4:00 p.m. | 972-615-2500 |
| Denver | 425-227-1389 | 7:30 a.m4:00 p.m. | 303-342-1500 |
| Houston | 817-222-5006 | 7:30 a.m4:00 p.m. | 713-230-8400 |
| New York | 718-995-5426 | 8:00 a.m4:30 p.m. | 516-683-2901 |
| Northern CA | 310-725-3300 | 7:00 a.m3:30 p.m. | 916-366-4001 |
| Southern CA | 310-725-3300 | 7:30 a.m4:00 p.m. | 858-537-5800 |
| | | | |

^{*}Facilities can be contacted through the RgnI Duty Officer during non-business hours.

FAA AND NWS Key air traffic facilities

DAILY NAS REPORTABLE AIRPORTS

| | *24 HR RGNL | | |
|---|------------------------------|--|------------------------------|
| AIRPORT | DUTY OFFICE | BUSINESS | BUSINESS |
| NAME | TELEPHONE # | HOURS | TELEPHONE # |
| Albuquerque Intl Sunport, NM | 817-222-5006 | 8:00 a.m5:00 p.m. | 505-842-4366 |
| Andrews AFB, MD | 718-995-5426 | 8:00 a.m4:30 p.m. | 301-735-2380 |
| Baltimore/Washington | | | |
| Intl Thurgood Marshall, MD | 718-995-5426 | 8:00 a.m4:30 p.m. | 410-962-3555 |
| Boston Logan Intl, MA | 617-238-7001 | 7:30 a.m4:00 p.m. | 617-561-5901 |
| Bradley Intl, CT | 617-238-7001 | 7:30 a.m4:00 p.m. | 203-627-3428 |
| Charlotte Douglas Intl, NC | 404-305-5180 | 8:00 a.m4:30 p.m. | 704-344-6487 |
| Chicago Midway, IL | 847-294-8400 | 8:00 a.m4:00 p.m. | 773-884-3670 |
| Chicago O'Hare Intl, IL | 847-294-8400 | 8:00 a.m4:00 p.m. | 773-601-7600 |
| Cleveland Hopkins Intl, OH | 847-294-8400 | 8:00 a.m4:00 p.m. | 216-898-2020 |
| Covington/Cincinnati, OH | 708–294–7401 | 8:00 a.m4:30 p.m. | 606-767-1006 |
| Dallas/Ft. Worth Intl, TX | 817-222-5006 | 8:30 a.m5:00 p.m. | 972-615-2531 |
| Dayton Cox Intl, OH | 847-294-8400 | 7:30 a.m4:00 p.m. | 937-454-7300 |
| Denver Intl, CO | 425–227–1389 | 7:30 a.m4:00 p.m. | 303-342-1600 |
| Detroit Metro, MI | 847-294-8400 | 8:00 a.m4:00 p.m. | 734-955-5000 |
| Fairbanks Intl, AK | 907–271–5936 | 7:30 a.m4:00 p.m. | 907-474-0050 |
| Fort Lauderdale Intl, FL | 404–305–5180 | 7:00 a.m3:30 p.m. | 305–356–7932 |
| George Bush | | | |
| Intercontinental/Houston, TX | 817-222-5006 | 7:30 a.m4:00 p.m. | 713-230-8400 |
| Hartsfield-Jackson Atlanta Intl, GA | 404–305–5180 | 7:00 a.m3:30 p.m. | 404-669-1200 |
| Honolulu Intl, HI | 310-643-3200 | 7:30 a.m4:00 p.m. | 808-840-6100 |
| Houston Hobby, TX | 817-222-5006 | 8:00 a.m5:00 p.m. | 713-847-1400 |
| Indianapolis Intl, IN | 847-294-8400 | 8:00 a.m4:00 p.m. | 317-484-6600 |
| Kahului/Maui, HI | 310-643-3200 | 7:30 a.m4:00 p.m. | 808–877–0725 816–329–2700 |
| Kansas City Intl, MO Las Vegas McCarran, NV | 816–329–3000 310–725–3300 | 7:30 a.m4:00 p.m. 7:30 a.m4:00 p.m. | 702-262-5978 |
| Los Angeles Intl, CA | 310-725-3300 | 7:00 a.m.–3:30 p.m. | 310-342-4900 |
| Memphis Intl, TN | 404-305-5180 | 7:30 a.m.–4:00 p.m. | 901-345-3235 |
| Miami Intl, FL | 404-305-5180 | 7:00 a.m4:00 p.m. | 305-869-5400 |
| Minneapolis/St. Paul, MN | 847-294-8400 | 8:00 a.m.–4:00p.m. | 612-713-4000 |
| Nashville Intl, TN | 404–305–5180 | 7:00 a.m.–3:30 p.m. | 615-781-5460 |
| New Orleans/Moisant Intl, LA | 817-222-5006 | 7:00 a.m4:30 p.m. | 504-471-4300 |
| New York Kennedy Intl. NY | 718-995-5426 | 8:00 a.m4:30 p.m. | 718-656-0335 |
| New York La Guardia, NY | 718-995-5426 | 8:00 a.m4:30 p.m. | 718-335-5461 |
| Newark Liberty Intl, NJ | 718-995-5426 | 8:00 a.m4:30 p.m. | 973-645-3103 |
| Norman Y. Mineta San Jose Intl, CA | 310-643-3200 | 7:30 a.m4:00 p.m. | 408-982-0750 |
| Ontario Intl, CA | 310-643-3200 | 7:30 a.m4:00 p.m. | 909-983-7518 |
| Orlando Intl, FL | 404-305-5180 | 7:30 a.m5:00 p.m. | 407-850-7000 |
| Philadelphia Intl, PA | 718-995-5426 | 8:00 a.m4:30 p.m. | 215-492-4100 |
| Phoenix Sky Harbor Intl, AZ | 310-643-3200 | 7:30 a.m4:00 p.m. | 602-379-4226 |
| Pittsburgh Intl, PA | 718-995-5426 | 8:00 a.m4:30 p.m. | 412-269-9237 |
| Portland Intl, OR | 425-227-1389 | 7:30 a.m4:00 p.m. | 503-493-7500 |
| Raleigh-Durham, NC | 404-305-5180 | 8:00 a.m4:30 p.m. | 919-840-5544 |
| Ronald Reagan Washington | | | |
| National, DC | 718-995-5426 | 8:00 a.m4:30 p.m. | 703-413-1535 |
| Salt Lake City, UT | 425-227-1389 | 7:30 a.m4:00 p.m. | 801-325-9600 |
| San Antonio Intl, TX | 817-222-5006 | 8:00 a.m4:30 p.m. | 210-805-5507 |
| San Diego Lindbergh Intl, CA | 310-725-3300 | 8:00 a.m4:30 p.m. | 619-299-0677 |
| San Francisco Intl, CA | 310-643-3200 | 7:00 a.m3:30 p.m. | 650-876-2883 |
| San Juan Intl, PR | 404–305–5180 | 7:30 a.m5:00 p.m. | 809-253-8663 |
| Seattle-Tacoma Intl, WA | 425-227-1389 | 7:30 a.m4:00 p.m. | 206-768-2900 |
| St. Louis Lambert, MO | 816-329-3000 | 7:30 a.m4:00 p.m. | 314-890-1000 |
| Tampa Intl, FL | 404-305-5180 | 7:30 a.m4:00 p.m. | 813-371-7700 |
| Ted Stevens Anchorage Intl, AK | 907-271-5936 | 7:30 a.m4:00 p.m. | 907-271-2700 |
| Teterboro, NJ | 718-995-5426 | 8:00 a.m4:30 p.m. | 201-288-1889 |
| Washington Dulles Intl, DC West Palm Beach, FL | 718–995–5426 404–305–5180 | 8:00 a.m4:30 p.m. 8:00 a.m4:30 p.m. | 703–661–6031 407–683–1867 |
| Westchester Co, NY | 718-995-5426 | 8:00 a.m4:30 p.m. 8:00 a.m4:30 p.m. | 407-683-1867 914-948-6520 |
| WESTGIESTEL CO, INT | 110-990-0420 | 6.00 a.m4:30 p.m. | 914-948-0020 |

^{*}Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel) spacing is required.

RALBUQUERQUE CENTER 134.6 132.8

Alamorgordo - 132.65 132.65

Amarillo Nr 1 - 127.85 Amarillo Nr 2 - 134.75

Amarillo Nr 2 - 134.75

Animas - 134.45 133.725 133.0

Carlsbad - 135.875

Clines Corners - 133.65 132.8 118.65

El Paso A - 135.875 134.175

El Paso B - 128.2 125.525

Fort Stockton - 135.875 120.925 132.2

Globe NR 1 - 135.725 132.9 132.9

Guadelupe 133.225

Mesa Rica - 119.45 128.675

Mount Dora - 133.05 128.225 127.85

Prescott - 135.325

Raton - 132.8

Roswell - 132.65 132.65

Sandia Mountain - 132.8

Tesuque Peak - 132.8

Truth or Consequences - 128.2

Tucumcari - 135.7 133.55 126.85

West Mesa - 124.325 133.65 119.45

Zuni - 124.325 134.6 132.9 120.55

®DENVER CENTER

Farmington - 133.425 128.125 125.675

H-1-2-3-4-5-6, L-5-6-7-8-9-10-11 (KZDV)

H-6, L-4-6-13-14-15-17

H-4-5-6, L-4-5-6-13-15

(KZAB)

4–15–17 (KZFW)

RFORT WORTH CENTER 134.4

Abilene - 134.25 127.45

Ardmore - 132.975 128.1

Big Spring - 133.7

Blue Ridge A - 124.875

Blue Ridge B - 127.6

Brownwood - 127.45

Clinton-Sherman - 132.45 128.4 126.3

Cumby - 132.85 132.02 **126.575**

Dublin A - 135.375

Dublin B - 127.15

El Dorado - 128.2

Frankston - 135.25 134.025

Gainsville - 124.75 126.775

Hobbs - 133.1

Keller - 135.275 134.15 133.25

Lubbock - 132.6 126.45 120.775

Marshall - 135.1 128.125

McAlester - 135.45 132.2

Midland (Site A) - 133.1 132.075

Mineral Wells - 120.35 127.0

Monroe - 126.325

Oklahoma City - 133.9 132.45

Paducah - 134.55 133.5 126.45 120.775

Paris - 123.925

Plainview - 126.45

San Angelo - 120.275 126.15

Scurry - 135.75 126.725

Shreveport - 126.325 133.875 132.275

Snyder - 132.6

Texarkana - 134.475 123.925 126.575

Tyler - 135.25 134.025

Waco - 133.3

Wichita Falls-(Site Nr1) - 132.925 124.525

Wichita Falls (Site Nr2) - 133.5 127.95

SC, 23 NOV 2006 to 18 JAN 2007

(KZHU)

RHOUSTON CENTER - 134.35

H-6-7-8-9. L-15-16-17-18

Arr-Dep US - 135.77 134.95 133.75 133.4 132.65 132.4 128.3 127.8 125.75 120.35

Alexandria - 132.7 127.85

Austin - 132.725 125.65

Beaumont - 133.8 126.95 **Cameron County - 132.65** 132.65

College Station - 135.325 134.8 134.5 125.15 120.4

Fredericksburg - 134.2 132.725

Galveston - 133.8

Galveston A - 133.4

Grand Isle - 134.9 132.175

Houma - 132.65 132.65

Intracoastal City - 120.35

Kerrville - 134.95

Kingsville - 133.75 128.15

Lacombe - 126.875

Lafayette - 133.65 126.35

Lake Charles - 132.95 124.7

Laredo - 128.6 127.8 126.75 Lometa - 132.35

Lufkin - 134.8 133.575 132.775

Newton - 134.8 126.95

New Orleans - 126.35 127.0

Palacios - 132.15 128.6

Rockport - 135.47 134.6 128.15 Rocksprings - 132.4 125.75

San Antonio - 134.95 132.8 **125.25**

San Antonio A - 135.65 134.6 126.425 120.6

Sealy - 132.15 126.425 119.175

Uvalde - 134.95 126.1

Victoria - 135.05 Vermillion - 120.35

®KANSAS CITY CENTER - 135.3

H-5-6, L-6-11-21-23, A-2

(KZKC)

Oklahoma City - 128.3 Ponca City - 127.8

Gage - 126.95

Tulsa - 135.55 128.8

® MEMPHIS CENTER - 134.25 124.35 120.85 119.3

H-5-6-9, L-6-8-14-17-21

(KZME)

Brinkley - 135.3 **124.025** 126.85 120.85 **Fayetteville - 132.55** 126.1

Fort Smith - 126.1

Greenville - 135.8 133.075 124.925

Harrison - 126.85

Hot Springs - 127.825

Malden - 135.5

McKellar-134.65

Pine Bluff - 132.425 135.875 125.475

Russellville - 128.475

South Fulton - 128.05

Walnut Ridge - 132.375 120.075

FLIGHT SERVICE STATION COMMUNICATION FREQUENCIES

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above, "T" indicates transmit only and "R" indicates receive only, RCO's available at NAVAID's are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

ALBUOUEROUE AFSS 122.55

ALAMOGORDO RCO 122.15 ANTON CHICO VORTAC 117.8T 122.1R CARLSBAD RCO 122.65

CIMARRON VORTAC 116.4T 122.1R

CLINES CORNERS RCO 122.3

CLOVIS RC0 122 5

378

CORONA VORTAC 115.5T 122.1R

DEMING RCO 122.2

EL PASO RCO 122.4 122.55

FARMINGTON RCO 122.4

GALLUP VORTAC 115.1T 122.1R 122.6

GUADALUPE PASS RCO 122.35

HOBBS RC0 122.2

LAS VEGAS RCO 122.6

ROSWELL RCO 122.45

RUIDOSO RCO 122.25

SANTA FE RCO 122.2

SILVER CITY VORTAC 110.8T 122.1R

SOCORRO VORTAC 116.8T 122.1R

TAOS VORTAC 117.6T 122.1R 122.25

TRUTH OR CONSEQUENCES RC0 122.2

TUCUMCARI RCO 122.35 **ZUNI RCO 122.05**

DE RIDDER AFSS 122.2

BATON ROUGE RCO 122.2

DRISKILL MOUNTAIN RCO 122.35

ESLER RCO 122.55

HOUMA RCO 122.45

LAFAYETTE RCO 122.35 LAKE CHARLES RCO 122.3

LEEVILLE VORTAC 113.5T 122.1R

MANY RCO 122 15

MONROE RCO 122.25

NEW ORLEANS RCO 122.6

PATTERSON RCO 122.5

SHREVEPORT RCO 122.6

SOUTH TIMBALIER RCO 122.6 TIBBY VORTAC 112.0T 122.1R

VERMILLION RCO 122.6

FORT WORTH AFSS 122.6

ABILENE RCO 122.65

AMARILLO RCO 122.65

BRECKENRIDGE RCO 122.5

BROWNWOOD RCO 122 5

CHILDRESS RCO 122.45

DALHART RCO 122.2

DALLAS RCO 122.3

GREGG COUNTY RCO 122.2

JACKSBORO RCO 122.4

LUBBOCK RCO 122.55

MINERAL WELLS RCO 122.2

PARIS RCO 122.25

PLAINVIEW RCO 122.55

SHERMAN/DENISON RCO 122.3

SNYDER RCO 122.45

TYLER RCO 122.3

WACO RCO 122.15

ICHITA FALLS RCO 122.65

JONESBORO AFSS 122.2 122.3

BATESVILLE RCO 122.25
EL DORADO RCO 122.65
FAYETTEVILLE RCO 122.3
FAYETTEVILLE (SPRINGDALE) RCO 122.55
FLIPPIN RCO 122.35
FORT SMITH RCO 122.2
HARRISON RCO 122.45
HOT SPRINGS VOR/DME 110.0T 122.1R
LITTLE ROCK RCO 122.55
MONTICELLO VOR/DME 111.6T 122.1R
PINE BLUFF RCO 122.6
SOCIAL HILL RCO 122.075
TEXARKANA RCO 122.45
MALNUT RIDGE VORTAC 114.5T 122.1R

MC ALESTER AFSS 122.65

ADA RCO 122.45
ARDMORE RCO 122.55
BARTLESVILLE RCO 123.6
GAGE RCO 122.55
HOBART RCO 122.2
MUSKOGEE RCO 122.5
NORMAN RCO 122.15
PONCA CITY RCO 122.25
RICH MOUNTAIN RCO 122.6
SAYRE VORTAC 115.27 122.1R
STILLWATER RCO 122.3
TULSA RCO 122.2 123.65
WILEY POST RCO 122.4 122.65
WOODRING RCO 122.4 122.65

MONTGOMERY COUNTY AFSS 122.2

BEAUMONT RCO 122.2 BRAZOS RCO 122.5 CENTER RCO 122.6 COLLEGE STATION RCO 122.2 122.65 GALVESTON RCO 122.15 122.2 HIGH ISLAND RCO 122.35 HOBBY RCO 122.35 HOUSTON RCO 122.4 HUNTSVILLE RCO 122.3 JASPER RCO 122.5 LUFKIN RCO 122.2 PALACIOS RCO 122.25 VICTORIA RCO 122.2

SAN ANGELO AFSS 122.25 ALICE RCO 122.6

AUSTIN RCO 122.55 BIG SPRING RCO 122.4 **BROWNSVILLE RCO 122.3** CENTER POINT VORTAC 117.5T 122.1R CORPUS CHRISTI RCO 122.65 COTULLA RCO 122.2 **DEL RIO RCO 122.3** EAGLE PASS RCO 122.3 122.3 FORT STOCKTON VORTAC 116.9 122.1R HARLINGEN RCO 122.35 JUNCTION RCO 122.3 LAMPASAS RCO 122.55 LAREDO RCO 122.3 MARFA VOR/DME 115.9T 122.1R MC ALLEN RCO 122.2 MIDLAND RCO 122.6 PECOS VOR/DME 111.8T 122.1R ROCKSPRINGS VORTAC 111.2T 122.1R SAN ANTONIO RCO 122.2 122.3 STONEWALL VORTAC 113.8T 122.1R TEMPLE VOR/DME 110.4T 122.1R THREE RIVERS VORTAC 111.4T 122.1R **UVALDE RCO 123.65** WINK RCO 122.05

380 FSD0

FLIGHT STANDARDS DISTRICT OFFICES (FSDO)

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office–Federal Aviation Administration.

ARKANSAS

1701 Bond Street Little Rock, AR

Telephone: 501 -918-4400

1-800-632-9566 (AR only)

LOUISIANA

9191 Plank Road Baton Rouge, LA 70811 Telephone: 225–358–6800 1–800–821–1960

NEW MEXICO

1601 Randolph Road SE, Suite 200N Albuquerque, NM 87106 Telephone: 505-764-1200 1-800-531-8999 (NM only) 1-800-531-1124

OKLAHOMA

The Parkway Building 1300 S. Meridian, Suite 601 Oklahoma City, OK 73108 Telephone: 405–951–4200

TEXAS

3300 Love Field Drive Dallas, TX 75235

Telephone: 214-902-1800 214-902-1862 (Fax) 214-902-1872 (Fax)

DFW Business Center, Suite 400 DFW Airport, TX 75261 Telephone: 972-456-6900

Route 3, Box 51 Lubbock, TX 79403-9712 Telephone: 806-740-3800 806-740-3809 (Fax) 1-800-858-4115

10100 Reunion Place, Suite 200 San Antonio, TX 78216-4128 Telephone: 210-308-3300 1-800-292-2023

2260 Alliance Blvd Fort Worth, TX 76177 Telephone: 817-491-5000

13100 Space Center Blvd., Suite 5400 Houston, TX 77059-3598 Telephone: 281-212-9700 888-285-2127 (Toll free)

281-212-9759 (Fax)

ROUTES PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their routes of flight to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and enroute flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, enroute and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

- 1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
- 2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
- 3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
- 4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
 - 5. Where more than one route is listed the routes have equal priority for use.
 - 6. Official location identifiers are used in the route description for VOR/VORTAC navaids.
 - 7. Intersection names are spelled out.
- 8. Navaid radial and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39; another navaid radial (e.g., UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
- 9. Where two navaids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
- 10. The effective times for the routes are in UTC. During periods of daylight savings time effective times will be one hour earlier than indicated. All states observe daylight savings time except Arizona, that portion of Indiana in the eastern time zone, Puerto Rico, and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
 - 11. (90-170 incl) altitude flight level assignment in hundred of feet.
- 12. The notations "pressurized" and "unpressurized" for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
 - High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.
 Sun

| 5un | |
|--------------|--|
| Mon thru Fri | |
| Sat | |

- 14. Use current SIDs and STARs for flight planning.
- 15. For high altitude routes, the portion of the routes contained in brackets is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

LOW ALTITUDE

| Terminals | Route | Effective Times (UTC) |
|--|---|-----------------------------|
| DALLAS/FORT WORTH AREA | | |
| Atlanta | TTT084 SOLDO UIM V54 TXK V278 VUZ V417 | |
| | MAYES V325 DALAS ATL | 0000-2359 |
| Chicago Midway | FUZ022 MLC206 MLC V63 UIN V116 PIA PIA056 | |
| | MOTIF JOT | 0000-2359 |
| Chicago O'Hare | FUZ022 MLC206 MLC V63 UIN V116 PIA V262 | |
| | BDF V10 PLANO | 0000-2359 |
| Houston Hobby | V369 TNV | 0000-2359 |
| Memphis | TTT084 SOLDO UIM V54 TXK V16 UJM | 1200–1400 and |
| | | 1800-0000 |
| New Orleans | TTT084 SOLDO UIM V114 VEILS | 0000-2359 |
| San Antonio | ACT V358 STV | 0000-2359 |
| HOUSTON METRO AREA | | |
| Dallas/Fort Worth Area From BUSH INTCNTL: | V477 CQY | 0000–2359 |
| New Orleans From HOUSTON HOBBY: | (below FL180) TRIOS V222 LCH V20 | 1100-0300 |
| New Orleans | (below FL180) V198 TBD V552 | 1100-0300 |

| Terminals | Route | Effective Times (UTC) |
|---|--|-----------------------------|
| NEW ORLEANS METRO AREA Dallas/Fort Worth | RQR V566 AEX V114 GGG V94 CQY | 0000-2359 |
| TULSA | V4.4.CCE V4.00 DVV.V4.4 | 0000 0250 |
| Indianapolis Springfield, IL | V14 SGF V190 PXV V11 V14 SGF V63 UIN V50 | 0000-2359 0000-2359 |
| Terre Haute | V14 SGF V190 PXV V7 | 0000-2359 |
| | HIGH ALTITUDE | |
| ALBUQUERQUE | | |
| Chicago O'HareBATON ROUGE METRO AREA | J18 GCK J96 IRK BDF–STAR | 1100-0400 |
| Atlanta | GCV LGC-STARor | |
| | (RNAV only) GCV HONIE RNAV*TWO-STAR | |
| DALLAS/FORT WORTH METRO AREA | TW/ 140 BWW 1447 CON OTT OTAB | |
| Baltimore | TXK J42 BKW J147 CSN OTT-STAR or | |
| | (GPS or DME/DME-IRU equipped) TXK J42 BKW | |
| 5 | J147 CSN RAVNN (RNAV)-STAR | |
| Boston | TTT064 LIT235 LIT J131 PXV J29 JHW J82 ALB | |
| | GDM-STARor | |
| | SQS J52 ATL GRD J209 RDU J207 FKN J79 | |
| | JFK060060 ORW PVD V151 INNDY | |
| Charlotte, NC | SQS J52 ATL UNARM-STAR | |
| Chicago Midway | FUZ J181 MAGOO MOTIF-STAR | |
| Chicago O'Hare | FUZ J181 BDF BDF-STAR | 1200-0400 |
| Cincinnati | TXK J42 MEM J29 PXV MOSEY-STAR | |
| Cleveland Metro | PXV ABERZ-STAR | |
| Denver | ADM ADM303 ROLLS J52 LAA QUAIL-STAR | |
| Detroit/Wayne | LIT J131 PXV VHP FWA MIZAR-STAR | 1200-0400 |
| Detroit Satellites: | TVI/ I4 24 DVI/ VIID DWA ODLIVY CTAD | |
| Pontiac, Willow Run, Ann Arbor Young, Windsor, Young | TXK J131 PXV VHP FWA CRUXX-STAR TXK J131 PXV VHP FWA V96 VWV VWV051 | |
| Fort Lauderdale | POOFE(all others) SWB HRV Q105 BLVNS Q102 BAGGS RSW FORTL-STAR | |
| | or | |
| | (/E, /G, /R, /J, /L, /Q) SWB HRV Q 105 BLVNS | |
| | Q102 BAGGS RSW SWAGS (RNAV)-STAR | |
| Kennedy (JFK) | SQS J52 ATL GRD J209 ORF J121 SIE | |
| | CAMRN-STAR | |
| La Guardia (LGA) | SQS J52 ATL AHN J208 HPW J191 PXT | |
| 1 2 20 - | KORRY-STAR | |
| Louisville | TXK J42 BNA BNA037 BARRY EWO | |
| Miami | (all others) SWB HRV Q105 BLVNS Q102 CYY CYY-STAR | |
| | or (all others) SWB MCB J50 CEW J2 SZW J43 PIE | |
| | CYY-STAR | |
| | Or (F. (C. (D. (L. (L. (O) CM/D LID)) 0405 DLV/NC | |
| | (E, /G, /R, /J, /L, /Q) SWB HRV Q105 BLVNS Q102 CYY DEEDS (RNAV)–STAR | |
| | or | |
| | (E, /G, /R, /J, /L, /Q) SWB MCB J50 CEW J2 | |
| Newark, NJ | SZW J43 PIE DEEDS (RNAV)-STAR TXK J42 GVE DYLIN-STAR | |
| Philadelphia | TXK J42 GVE DTEIN-STAR | |
| Phoenix | ABI J4 SSO J50 TOTEC | 0100-0500 |
| Pittsburgh | TXK J42 MEM J29 PXV HNN WISKE-STAR | |
| San Francisco | TTT275 GTH119 GTH GTH288 TCC105 TCC J76 | |
| | FTI J58 OAL MOD | |
| San Jose, CA | TTT275 GTH119 GTH GTH288 TCC105 TCC J76 FTI J58 OAL HYP | |
| West Palm Beach | SWB HRV 0105 REDFN 0100 SR0 GULL0 | |
| west raiiii deacii | (RNAV)-STAR | |
| | | |

| Terminals | Route | Effective Times (UTC) |
|------------------------------------|---|-------------------------------|
| | or | • • |
| | SWB MCB J50 CEW J2 SZW CTY GULLO (RNAV)-STAR | |
| | or (GPS or DME/DME-IRU equipped) SWB MCB J50 CEW J2 SZW CTY GULLO (RNAV)-STAR or | |
| | (GPS or DME/DME-IRU equipped) SWB HRV Q105 REDFN Q100 SRQ GULLO (RNAV)-STAR | |
| HOUSTON METRO AREA | | |
| Atlanta | BTR GCV LGC-STARor | |
| Baltimore, MD | (RNAV only) BTR GCV HONIE RNAV*TWO-STAR BTR SJI J37 SPA J14 RIC OTT-STAR or | |
| | (GPS or DME/DME-IRU equipped) BTR SJI J37 SPA J14 RIC RAVNN (RNAV)-STAR | |
| Boston | BTR SJI J37 MGM MGM048138 GRD J209 RDU J207 FKN J79 JFK ORW-STAR | |
| Bradley | BTR SJI J37 MGM MGM048138 GRD J209 RDU J207 FKN J79 JFK DPK DPK-STAR | |
| Charlotte | BTR BTR055100 MEI J239 ATL UNARM-STAR J101 STL STL349 MAG00 BDF-STAR | 1400-0100 0111-2024 and |
| | or | 2126–2359 |
| | J33 FUZ J105 BDF-STAR | 2025–2125 and |
| Cincinnati | J101 LIT J131 PXV MOSEY-STAR | 0000-0110 |
| Cleveland Metro | PXV ABERZ-STAR | |
| Detroit/Wayne Fort Lauderdale | J101 LIT J131 PXV VHP FWA MIZAR-STAR LEV Q102 BAGGS RSW FORTL-STAR | |
| Kennedy (JFK) | BTR SJI J37 MGM MGM048138 GRD J209 ORF J121 SIE CAMRN-STAR | |
| La Guardia (LGA) | BTR SJI J37 MGM AHN J208 HPW J191 PXT | |
| Miami | KORRY-STAR(all others) LEV Q102 CYY CYY STAR | |
| | or (/E, /G, /R, /J, /L, /Q) LEV Q102 CYY DEEDS | |
| Newark, NJ | (RNAV)-STARBTR SJI J37 SPA J14 J51 FAK DYLIN-STAR | |
| Orlando | LEV Q100 REMIS PIE MINEE STAR | |
| Philadelphia | BTR SJI J37 SPA J14 J51 FAK DPNT-STAR | |
| Pittsburgh Tampa/St. Petersburg | J101 LIT J131 PXV IIU HNN WISKE-STAR LEV Q100 REMIS BLOND BLOND-STAR | |
| Washington Dulles | BTR SJI J37 SPA J14 J51 FAK COATT-STAR | |
| Washington Natl | BTR SJI J37 SPA J14 RIC IRONS-STAR or | |
| | (GPS or DME/DME-IRU equipped) BTR SJI J37 SPA J14 RIC OJAAY (RNAV)-STAR | |
| West Palm Beach | LEV Q100 SRQ GULLO (RNAV)-STAR | |
| | (GPS or DME/DME-IRU equipped) LEV Q100 SRQ GULLO (RNAV)-STAR | |
| NEW ORLEANS | dollo (mvv) on m | |
| AtlantaBaltimore, MD | GCV LGC-STAR | |
| | (GPS or DME/DME-IRU equipped) J37 SPA J14 | |
| Bester | RIC RAVVN (RNAV)-STAR | |
| Boston | J37 MGM MGM048138 GRD J209 RDU J207 FKN J79 JFK ORW-STAR | |
| Bradley | J37 MGM MGM048138 GRD J209 RDU J207 FKN J79 JFK DPK DPK-STAR | |
| Charlotte | MEI J239 ATL UNARM STAR | |

Effective

| | | Times |
|-------------------|---|-----------|
| Terminals | Route | (UTC) |
| Chicago O'Hare | J29 KURTZ VHP OKK OKK-STAR | 2030-2100 |
| Cincinnati | J35 MEM J29 PXV MOSEY-STAR | |
| Cleveland Metro | IIU ABERZ-STAR | |
| Denver | J58 FUZ J21 ADM J52 LAA QUAIL-STAR | |
| Detroit/Wayne | MEM J29 IMPEL VHP FWA MIZAR-STAR | |
| Kennedy (JFK) | J37 MGM MGM048138 GRD J209 ORF J121 SIE | |
| | CAMRN-STAR | |
| La Guardia (LGA) | J37 MGM AHN J208 HPW J191 PXT | |
| | KORRY-STAR | |
| Louisville | J35 MEM BWG EWO | |
| Newark, NJ | J37 SPA J14 J51 FAK DYLIN-STAR | |
| Washington Dulles | J37 SPA J14 J51 FAK COATT-STAR | |
| Washington Natl | J37 SPA J14 RIC IRONS-STAR | |
| | or | |
| | (GPS or DME/DME-IRU equipped) J37 SPA J14 | |
| | RIC OJAAY (RNAV)-STAR | |
| SAN ANTONIO | | |
| Atlanta | J2 LCH J590 GCV LGC STAR | |
| | or | |
| | (RNAV only) J2 LCH J590 GCV HONIE RNAV-STAR | |
| Denver | J17 AMA TBE J171 TODDE QUAIL-STAR | |
| Detroit/Wayne | ALAMO-DP LFK J29 MEM PXV VHP FWA | |
| | MIZAR-STAR | |
| | | |

HIGH ALTITUDE—SINGLE DIRECTION ROUTES

| Airway | Segment Fixes | Direction Effective | Effective Times (UTC) |
|--------|------------------------------------|------------------------|-----------------------------|
| J6 | Lancaster, PA to Little Rock, AR | Southwest | 1100-0300 |
| J42 | Texarkana, AR to Robbinsville, NJ | Northeast | 1100-0300 |
| J110 | Farmington, NM to Boudler City, NV | West | 1500-0300 |
| J180 | Little Rock, AR to Humble, TX | Southwest | 1200-0400 |

GULF OF MEXICO "O ROUTES"

These area navigation routes extend more than 12 miles offshore in airspace controlled by the Federal Aviation Administration (FAA). Additional regulatory information for these routes can be found in the Notices to Airmen Publication, Part 3, International Notices to Airmen.

These routes have a Minimum Obstruction Clearance Altitude (MOCA) of 1500 feet (MSL). The Minimum Enroute Altitude (MEA) for these routes is 6000 feet (MSL)

0100

| LEV VORTAC | |
|------------|------------------------|
| REDFN | N28°52.98'/W088°42.11' |
| ROZZI | N28°18.87'/W086°42.31' |

V086°42.31' REMIS N27°53.04′/W085°15.47′

SRQ VORTAC

0102

LEV VORTAC

N28°22.94'/W088°02.05' BLVNS BUNNZ N28°00.58'/W086°45.76' BACCA N27°35.51'/W085°20.66' CIGAR N27°29.61'/W084°46.99' BAGGS N27°08.06'/W082°50.45'

CYY VORTAC

Q105

HRV VORTAC

FATS0 N29°41.40′/W089°47.08′ REDFN N28°52.98'/W088°42.11' BLVNS N28°22.94'/W088°02.05'

PREFERRED IFR ROUTES **O-ROUTES REGULATORY**

Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this A/FD volume have at least part of one of their leg segments within this volume's area of coverage.

GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. O routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note "GNSS REQUIRED".

| | reconstruct operations only. I | - |
|-------------|--------------------------------------|--|
| Route | Segment | DME |
| Q19 | PLESS-NASHVILLE | ENL, GQO, PXV, BNA, IIU, FAM, BWG, CSX |
| Q21 | JONEZ-RAZORBACK | BYP, EOS, TUL, TXK, ADM, RZC, OKM |
| Q23 | FORT SMITH-RAZORBACK | |
| Q25 | MEEOW-WALNUT RIDGE | ELD, MEM, LIT, FAM, RZC |
| | WALNUT RIDGE-WLSUN | MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH |
| | WLSUN-POCKET CITY | BWG, PXV, ENL, BNA, TTH |
| Q26 | WALNUT RIDGE-DEVAC | LIT, JKS, GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG |
| Q27 | FORT SMITH-ZALDA | OKM, SGF, RZC, EOS, TUL |
| Q28 | GRAZN-PYRMD | EIC, LIT, ELD, OKM, TXK |
| | PYRMD-HAKAT | ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK |
| | HAKAT-ESTEE | ARG, LIT, FAM, SGF, MEM |
| 000 | ESTEE-POCKET CITY | ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA |
| Q29 | HARES-MEMPHIS | MEM, ARG, LIT, JAN, ELD, SQS |
| | MEMPHIS-SIDAE | MEM, PXV, BNA, BWG, ARG, ENL |
| 000 | SIDAE-POCKET CITY | PXV, TTH, BWG, ENL |
| Q30 | SIDON-VULCAN | GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG |
| Q31 | DHART-JODOX | SQS, LIT, TXK |
| | JODOX-MARVELL | SQS, LIT, ELD, MEM, ARG |
| | MARVELL-TIIDE | ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH |
| Q32 | TIIDE-POCKET CITY EL DORADO-GAGLE | BWG, PXV, ENL, TTH AEX, JAN, MEM, SQS, SWB, ELD, LIT , TXK |
| Ų32 | GAGLE-CRAMM | JAN, SQS, MEM, ARG, VUZ, BNA, LIT |
| | CRAMM-NASHVILLE | BWG, MEM, VUZ, BNA, GQO |
| | NASHVILLE-SWAPP | BWG, IIU, PXV, VXV, BNA, GQO |
| Q33 | DHART-LITTLE ROCK | AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS |
| Q 00 | LITTLE ROCK-PROWL | ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL |
| 034 | TEXARKANA-MATIE | LIT, SWB, TXK, BYP, EIC, ELD, SQS |
| ų. | MATIE-MEMPHIS | LIT, ARG, MEM, ELD, SQS |
| | MEMPHIS-SWAPP | BWG, ARG, MEM, MKL, SQS, PXV, BNA, GQO, IIU, VXV |
| Q36 | RAXORBACK-TWITS | RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT |
| • | TWITS-DEPEC | MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU |
| | DEPEC-NASHVILLE | GQO, BWG, BNA, PXV, IIU |
| | NASHVILLE-SWAPP | VXV, BWG, BNA, GQO, PXV, IIU |
| Q38 | ROKIT-INCIN | DAS, LCH, SWB, IAH, LFK, HUB, AEX |
| - | INCIN-LAREY | JAN, MCB, SWB, AEX |
| | LAREY-BESOM | JAN, JYU, MEI, SQS, VUZ |
| Q40 | ALEXANDRIA-DOOMS | AEX, SWB, LCH, JAN, HEZ, MCB |
| | DOOMS-WINAP | JAN, SQS, MEL, MCB |
| | WINAP-MISLE | MEI, VUZ, JYU |
| Q104 | DEFUN-HEVVN | PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG |
| | HEVVN-PLYER | PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD |
| | PLYER-SWABE | PIE, ORL, OMN, SRQ, TAY |
| | SWABE-ST PETERSBURG | LAL, ORL, OMN, SRQ, PHK, PIE |
| | ST PETERSBURG- | PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN |
| | CYPRESS | |
| Q106 | SMELZ-BULZI | LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW |
| | BULZI-DRABK | AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI |
| | DRABK-GADAY | MGM, PZD, OTK, JYU, SZW, CEW, SJI |
| Q108 | GADAY-CLAWZ | MGM, SJI, CEW, JYU, PZD, OTK, MCN, SZW, LGC, TAY, AMG |

| 386 | | PREFERRED IFR ROUTES |
|-------|-------------|--|
| Route | Segment | DME |
| Q110 | KPASA-BRUTS | SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG |
| | BRUTS-GULFR | OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK |
| | GULFR-FEONA | TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM |
| Q112 | DEFUN-HEVVN | PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB |
| | HEVVN-INPIN | JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG |
| Q116 | KPASA-BRUTS | SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG |

BRUTS-GULFR OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK GULFR-CEEYA MCN, AMG, PZD, OTK, SZW, TAY

Q118 KPASA-BRUTS SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG

BRUTS-LENIE OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN

*Denotes Critical DME Facility

High Altitude Redesign (HAR) Phase I RNAV routing, pitch and catch points:

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing, between specific fixes described by **pitch** (entry into) and **catch** (exit out of) the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of non-restrictive routing. The catch point indicates where a flight ends a segment of non-restrictive routing and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the non-restrictive routing portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: www.faa.mil/hialt. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.

High Altitude Redesign (HAR) Phase One Expansion Airspace

HAR expansion airspace may pitch vertical pitch line, or at the fixes

Except as noted, flights entering at the airspace boundary, at the

west longitude to the ZHU southern boundary. 90 degrees west longitude, the 90 degrees south to the ZHU boundary. Then west to except between PMM and GSH, then boundary to the ZME/ZID boundary. west longitude from the ZMP/ZAU following the ZME east boundary Vertical Pitch Line: 86 degrees No westbound traffic between PMM and GSH. ZNZ ZBW ZDC ZNZ ZMA 20B E M-DG ZXX Sovob Boyob W 98 W 06 GES COESNA ZME So. listed on the following page. ZKC CH2 ZFW 210 VOZ ZAB ZLC ZLA ZSE ZOA

SC, 23 NOV 2006 to 18 JAN 2007

PREFERRED IFR ROUTES

HAR Special High Altitude Pitch (entry) Points for non-restrictive routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non-restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, or MIF

Traffic originating outside of HAR airspace may also begin non-restrictive routing upon crossing the pitch line depicted on the associated graphic.

HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque ABQ, GUP, HANOS or ZUN

Austin Terminal Area ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV

BOCA RATON, FL TBIRD KPASA Q118 LENIE

r

TBIRD KPASA Q116 CEEYA

TBIRD KPASA Q110 FEONA

TBIRD SMELZ Q106 BULZI or

TBIRD SMELZ Q106 GADAY

Burbank includes DAG LAS
Santa Monica or
And Van Nuys HEC EED

or PMD BLH

GMN, or MAKRS

Chicago Terminal Area IOW, PLL275065, MZV or BAE

Dallas/Fort Worth Terminal Area Aircraft landing ORDT (Except MDW) shall file EAKER MIDEE BDF STAR or MLC

J105 SGF BDF STAR.

ABI, LBB, TCC, CDS, MRMAC, IRW, TUL, MLC, TXK, ELD,

or SWB

Denver Terminal Area PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE,

CABET, WEEDS, OR BINKE

Fort Lauderdale (or) THNDR KPASA Q118 LENIE

Fort Lauderdale Executive

THNDR KPASA Q116 CEEYA

or

THNDR KPASA Q110 FEONA or

THNDR SMELZ Q106 GADAY

or

THNDR SMELZ Q106 BULZI

Houston Bush LIT, EMG, MLC, JCT

or

Aircraft destined ATL Terminal Area LCH Q24 PAYTN HONIE-RNAV STAR

UI Airaraft inining 127 to the North Foots BRT CUSTI 022 CAT

Aircraft joining J37 to the North-East: BPT GUSTI Q22 CATLN

Aircraft joining J42 to the North-East, ELD Q32 J42

Houston Hobby LIT, EMG, MLC, JCT,

or

Aircraft joining J42 to the North-East, ELD Q32 J42

Jacksonville, FL TAY

Kansas City Terminal Area TIFTO, CATTS or KENTN

390

PREFERRED IFR ROUTES

Los Angeles, inloudes DAG LAS Ontario

TRM EED TRM PKE

GMN, or RZS

Las Vegas DOBNE, MOSBI, NICLE, TRALR or ZELOT

Long Beach includes Orange County

TRM PKE

TRM EED

GMN, SNS, EHF or LANDO BNA, HAAWK, SALMS or SQS

Memphis Miami Terminal Area WINCO KPASA Q118 LENIE

WINCO KPASA Q116 CEEYA

WINCO KPASA Q110 FEONA WINCO SMELZ Q106 GADAY

WINCO SMELZ Q106 BULZI

Milwaukee GREAS

Minneapolis Terminal Area* ONL, ABR, FAR, OBH, OVR, FOD

I New Orleans Terminal Area AEX, MEI, SQS or KAPLN Orlando Terminal Area WEBBS BRUTS Q118 LENIE

WEBBS GULFR 0116 CEEYA

WEBBS BULZI 0106 GADAY

WEBBS FEONA

WEBBS BULZI

Palm Beach, FL TBIRD KPASA Q118 LENIE

TBIRD KPASA Q116 CEEYA TBIRD KPASA Q110 FEONA

TBIRD SMELZ Q106 BULZI TBIRD SMELZ Q106 GADAY

Palm Springs TRM JOTNU BLD

TRM EED

TRM PKE

Phoenix CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK

Portland, OR PDT or TIMEE

Salt Lake City HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS or BPI

TCH J56 CHE TCH J173 EKR

Saint Louis VIH, MAP, MYERZ or MCM

HLV MCI

San Antonio Terminal Area Aircraft North of LFK, LFK

01

Aircraft South of HUB, ELA

or

Aircraft South of LFK and North of HUB LCH

. . .

FUZ, SJT, MQP or ABI

San Diego TRM EED

or

TRM PKE

or

TRM JOTNU BLD

San Francisco Bay Area GALLI, INSLO, HAROL or JSICA

Oakland GALLI, INSLO, HAROL or JSICA San Jose GALLI or INSLO

Seattle BLUIT

Southwest Florida Airports JOCKS KPASA Q118 LENIE

(RSW/FMY)

JOCKS KPASA Q116 CEEYA

or

JOCKS KPASA Q110 FEONA

JOCKS SMELZ Q106 GADAY

or

JOCKS SMELZ Q106 BULZI

Tampa Terminal Area BRUTS Q118 LENIE

GULFR Q116 CEEYA

0

BULZI Q106 GADAY or FEONA or BULZI

*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

Catch Points for Airports Located Outside HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

Atlanta Terminal Area Aircraft through Memphis airspace from Kansas City Center East of FAM, Pless

019 BNA-STAR

or

Aircraft through Memphis airspace from Kansas City Center West of FAM, ARG

Q26 DEVAC-STAR

or

MEM-STAR

or

Aircraft through Memphis airspace from Indianapolis Center West of a line from

VHP to BWG, BNA-STAR

or

Aircraft through Memphis airspace from Indianapolis Airspace East of a line

from VHP to BWG, BWG-STAR

01

Aircraft through Memphis airspace from Ft. Worth Center, MEM-STAR

MIE-STAR

0.

MEI HONIE-RNAV STAR

or

PATYN HONIE-RNAV STAR

Baltimore–Washington* GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ

Boston* GEP, CRL, ECK, IIU, BNA or VUZ

Buffalo* GEP or CRL

392

PREFERRED IFR ROUTES

 Hartford Bradley*
 GEP or CRL

 Canton-Akron*
 GIJ, VHP or GEP

 Charlotte
 BNA or VUZ

Cincinnati Terminal Area Aircraft North of SLC: JOT

Aircraft over or South of SLC: ENL

Or

SLC or SFO Departures: ENL or JOT

BNA or PXV

Cleveland Terminal Area* OBK

Detroit Terminal Area BAE MKG POLAR-STAR

or

VHP FWA MIZAR-STAR

Detroit Young LAN SPRTN-STAR

or

VHP FWA

Indianapolis Terminal Area BIB, SPI or JOT

Louisville ENL or MEM

Newark* GEP, VHP, FLM, IIU, BNA or VUZ

or

IOW GIJ J554 CRL J584 SLT FQM-STAR

New York Kennedy* GEP, VHP, FLM, IIU, BNA or VUZ

or

DBQ J94 PMM J70 LVZ LENDY-STAR

New York LaGuardia* GIJ, GEP, VHP, BAE, FLM, IIU, BNA or VUZ
Philadelphia Terminal Area* GIJ, GEP, VHP, BAE, WHETT, BNA or VUZ

Pittsburgh Terminal Area* VHP, GIJ, BAE or GEP

Pontiac LFD, LAN, VHP, FWA or GEP

Providence JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA or VUZ

 Raleigh–Durham
 FLM, IIU, BNA or VUZ

 Toronto Terminal Area
 ECK, SVM, SSM or GEP

 Teterboro*
 GEP, VHP, CRL, BNA or VUZ

Washington Dulles/National* GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ

White Plains* GEP, VHP, CRL, FLM, IIU, BNA or VUZ

Willow Run* LAN, LFD, VHP, FWA or GEP

*Eastbound aircraft over-flying Minneapolis center airspace: Entering Toronto center, direct SSM or via J63 or J522 or Q505 or Q504 or Q502 or Q501.

or

Entering Chicago or Cleveland Center airspace from north of DPR J16 MCW: GEP

or

Entering Chicago or Cleveland center airspace from or south of DPR J16 MCW: CRL.

Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area CURLY-STAR

or ESPAN-STAR

0

LAVAN-STAR or LVS-STAR or MIERA-STAR

PREFERRED IFR ROUTES

Austin Terminal Area Aircraft West of a N-S line @LFK BLEWE-STAR Aircraft East of a N-S line @LFK IDU-STAR LLO-STAR Boca Raton, FL CEW DEFUN 0112 INPIN SHADY-STAR Aircraft through ZHU remain South of ZME/ZTL airspace DEFUN Q112 INPIN SHADY-STAR Aircraft through ZHU remain South of ZME/ZTL airspace SZW INPIN SHADY-STAR Chicago Midway CVA MOTIF-STAR PIA MOTIF-STAR DBQ CVA MOTIF-STAR LMN MOTIF-STAR Chicago O'Hare Terminal Area GEP DLL MSN JVL JVL-STAR TVC PMM-STAR or FOD DBQ JVL JVL-STAR MCW JVL-STAR GCK IRK BDF-STAR Dallas/Fort Worth Terminal Area Aircraft entering ZFW from ZHU between a line from, but not including, AEX to TTT, to, but not including, JCT, shall file JUMBO or AEX. Aircraft flying between a line from JCT to TTT to CME, TQA Aircraft flying between a line from, but not including, CME to TTT to, but not including, TCC TURKI Aircraft flying between a line from TCC to TTT, to but not including, LBL, HEATR Aircraft flying between a line from LBL to TTT to, but not including, PER, MOOSE or HEATR Aircraft flying between a line from PER to TTT to, but not including, RZC LOSZY Aircraft through Memphis airspace from North and West of PXV, RZC Q23 FSM-STAR Aircraft thorugh Memphis airspace from East of PXV, PXV Q25 MEEOW-STAR Aircraft through Memphis airspace from J6 down to, but not including J52, LIT-STAR SQS-STAR

Aircraft through Memphis airspace from J52 and South of J52, SQS-STAR or Aircraft flying between a line from, but not including, MLU to TTT to AEX, AEX

PREFERRED IFR ROUTES

Denver Terminal Area OATHE DANDD-STAR HGO QUAIL-STAR LOPEC-STAR ALS LARKS-STAR HBU POWDR-STAR EKR TOMSN-STAR CHE TOMSN-STAR BFF LANDR-STAR LBF SAYGE-STAR HCT SAYGE-STAR RSK LARKS-STAR LAA QUAIL-STAR GCK J154 RYLIE DANDD-STAR OCS J154 ALPOE RAMMS-STAR YANKI J114 SNY LANDR-STAR Aircraft filed BIL or east: MBW RAMMS-STAR Ft Lauderdale or CEW DEFUN Q104 PIE SWAGS-STAR Ft Lauderdale Executive Aircraft through ZHU remain South ZME/ZTL airspace DEFUN 0104 PIE SWAGS-STAR Aircraft through ZHU remain South of ZME/ZTL airspace SZW HEVVN Q104 PIE SWAGS-STAR Houston Bush CRP-STAR or CVE-STAR Aircraft South and East of LLA LLA-STAR LLO-STAR LUKIY-STAR MISLE Q40 AEX-STAR SAT-STAR Aircraft North and East of SJI SJI-STAR Aircraft East of PXV PXV Q31 DHART SWB-STAR Aircraft North and West of PXV PROWL Q33 DHART SWB-STAR

I

| | PREFERRED ILK KOOLES |
|---------------------------|--|
| Houston Hobby | Aircraft South and East of GIRLY GIRLY-STAR or Aircraft North and East of SJI SJI-STAR or CRP-STAR or ELLVR-STAR or SAT-STAR or SWB-STAR or BESOM Q38 ROKIT ROKIT-STAR or Aircraft East of PXV PXV Q29 HARES SWB-STAR or Aircraft North and West of PXV PROWL Q33 DHART SWB-STAR |
| Jacksonville | GADAY ZOOSS TAY-STAR Aircraft through ZHU remain south of ZME/ZTL airspace or ZOOSS TAY-STAR |
| John Wayne-Orange County | HEC, PGS, BLD or Aircraft south of TBC (from ZAB) HIPPI |
| Kansas City Terminal Area | LMN BQS-STAR or PWE RBA-STAR or EMP JHAWK-STAR |
| Las Vegas | Aircraft over PGA or North of PGA KSINO-STAR or Aircraft South of PGA PGS LYNSY-STAR or DILCO-STAR or LIDAT-STAR or IGM-STAR |
| Los Angeles Terminal Area | Aircraft North of TBC HEC or PGS or Aircraft South of TBC (from ZAB) HIPPI or BLD |
| Miami Terminal Area | CEW DEFUN Q104 CYY DEEDS—STAR Aircraft through ZHU remain South ZME/ZTL airspace or DEFUN Q104 CYY DEEDS—STAR Aircraft through ZHU remain South of ZME/ZTL airspace |

SZW HEVVN Q104 CYY DEEDS-STAR

PREFERRED IFR ROUTES

Minneapolis Terminal Area Aircraft from North/West/South: FAR GEP-STAR or RWF SKETR-STAR ALO KASPR-STAR BRD GEP-STAR BAE EAU-STAR FOD TWOLF-STAR Memphis Terminal Area ARG-STAR or BWG-STAR or FSM-STAR PXV-STAR LIT-STAR RZC-STAR SQS-STAR VUZ-STAR or BNA-STAR GOO-STAR or ELD-STAR Naples, FL CEW DEFUN 0104 PLYER PIKKR-STAR Aircraft through ZHU remain South of ZME/ZTL airspace DEFUN Q104 PLYER PIKKR-STAR Aircraft through ZHU remain South ZME/ZTL SZW HEVVN Q104 PLYER PIKKR-STAR Nashville CCT-STAR or GHM-STAR or GUITR-STAR or TINGS-STAR or VOLLS-STAR New Orleans Terminal Area BLUEZ-STAR GPT-STAR LCH-STAR MCB-STAR TBD-STAR or FATS0

Т

Oakland ILA KATTS PAMMY Aircraft over or South of a line ILC J16 DVC REANA KATTS PAMMY Aircraft from North of ILC: JOPER PAMMY KATTS PAMMY Over or South of ILC: REANA KATTS PAMMY Orlando Terminal Area GADAY Q108 CLAWZ LEESE-STAR Aircraft through ZHU remain south of ZME/ZTL airspace or OTK LEESE-STAR Palm Beach, FL CEW DEFUN Q112 INPIN GULLO-STAR Aircraft through ZHU remain south of ZME/ZTL airspace DEFUN Q112 INPIN GULLO-STAR Aircraft through ZHU remain south ZME/ZTL SZW INPIN GULLO-STAR Phoenix CORKR DRK-STAR Includes Williams Aircraft from ZDV GUP-STAR or Aircraft from ZAB ZUN-STAR MOHAK-STAR or SS0 VYLLA TUS-STAR Phoenix Satellites FLG-STAR SSO-STAR MOHAK-STAR VYLLA TUS-STAR Portland, OR Terminal Area ARNIT BONVL-STAR LARNO BONVL-STAR MOXEE MOXEE-STAR SGF TRAKE-STAR St. Louis BUM TRAKE-STAR ANX TRAKE-STAR

LMN IRK RIVRS-STAR or RBS VILA-STAR

PREFERRED IFR ROUTES

398 Salt Lake City Terminal Area JNC J12 HELPR SPANE-STAR EKR MTU SPANE-STAR BCE DTA-TCH MLF DTA-TCH BVL BVL-STAR BYI BEARR-STAR PIH BEARR-STAR DBS LHO-STAR JAC LHO-STAR BPI LHO-STAR OCS LHO-STAR San Diego Terminal Area EED-STAR LAX-STAR GBN-STAR Santa Ana HEC, PGS, BLD or HIPPI San Antonio Terminal Area West of a N-S line @ LFK BLEWE-STAR East of a N-S line @ LFK IDU-STAR or CSI-STAR or JCT-STAR or LLO-STAR or CRP-STAR or LRD-STAR San Francisco FMG GOLDN-STAR or MVA MOD-STAR ENI GOLDN-STAR OAL MOD-STAR South of a line ILC to DVC: REANA KATTS OAL MOD-STAR FMG HYP HYP-STAR San Jose OAL HYP HYP-STAR or ENI GOLDN-STAR

South of a line ILC to DVC REANA KATTS KICHI CANDA HYP-STAR

PREFERRED IFR ROUTES

Aircraft From Northeast/Southeast/South: Seattle Terminal Area

TEMPL GLASR-STAR

SUNED CHINS-STAR

or BTG OLM-STAR

Southwest Florida Airports

CEW DEFUN Q104 SWABE JOSFF-STAR RSW and FMY

Aircraft through ZHU remain south of ZME/ZTL

airspace

DEFUN Q104 SWABE JOSFF-STAR

Aircraft through ZHU remain south of ZME/ZTL

airspace

SZW HEVVN Q104 SWABE JOSFF-STAR

Tampa Terminal Area CEW DEFUN Q104 HEVVN DARBS-STAR/CLAMP-STAR

Aircraft through ZHU remain south of ZME/ZTL

airspace

DEFUN Q104 HEVVN DARBS-STAR/CLAMP-STAR Aircraft through ZHU remain south of ZME/ZTL

SZW DARBS-STAR/CLAMP-STAR

Tucson DRK PXR-STAR

MOHAK GBN-STAR

NORTH AMERICAN ROUTES FOR NORTH ATLANTIC TRAFFIC (NAR)

This is to notify all users that the North American Routes will be placed in the Northeast edition of the Airport/Facility Directory beginning January 1, 1998.

VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are portrayed on VFR Charts using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a checkpoint flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual checkpoint name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

HOUSTON TERMINAL AREA CHART/FLYWAY CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION |
|----------------|---------------------------------|------------------------|
| VPBWY | | N29°46.25′/W095°09.24′ |
| VPDTN | | N29°46.59′/W095°22.01′ |
| VPGLA | | N30°08.32'/W095°06.62' |
| VPGLB | | N30°07.80′/W094°55.70′ |
| VPKTY | | N29°47.05′/W095°44.92′ |
| VPPLN | | N30°08.80′/W095°50.42′ |
| VPRSN | | N29°30.00′/W095°41.00′ |
| VPSND | | N29°23.13′/W095°28.86′ |
| VPSNT | | |
| | | N29°49.29′/W094°53.94′ |
| VPTNE | | N29°47.48′/W095°03.34′ |
| VPTNW | | N29°47.06′/W095°33.81′ |
| VPTRK | | N29°24.06′/W095°10.44′ |
| | KANSAS CITY SECTIONAL AREA CHAR | T |
| VPAGO | | N37°50.33′/W090°29.03′ |
| VPBEK | | N37°15.07′/W092°30.67′ |
| VPDEN | | N37°46.75′/W092°19.20′ |
| VPENE | | N37°44.75′/W091°55.78′ |
| VPESS | | N36°59.48′/W091°00.88′ |
| VPFME | | |
| | | N37°41.00′/W092°38.33′ |
| VPGXY | | N37°15.50′/W091°40.17′ |
| VPMBE | | N37°11.08′/W090°27.92′ |
| VPMKE | | N37°24.47′/W092°40.00′ |
| VPROV | | N38°01.72′/W091°12.81′ |
| VPUTT | | N37°52.05′/W092°01.20′ |
| VPWOC | | N37°18.03′/W092°18.63′ |
| VPWRO | | N37°39.12′/W091°45.68′ |
| VPXIZ | | N37°26.60′/W092°05.42′ |
| | KANSAS CITY TERMINAL AREA CHAR | T |
| VPATN | ATCHISON | N39°33.62′/W095°07.65′ |
| VPBGS | BLUE SPRINGS | N39°01.82′/W094°16.32′ |
| VPBSP | | • |
| | BONNER SPRINGS | N39°03.78′/W094°53.10′ |
| VPCHB | CHOUTEAU BRIDGE | N39°08.77′/W094°32.03′ |
| VPDS0 | DE SOTO | N38°58.68′/W094°58.48′ |
| VPESG | EXCELSIOR SPRINGS | N39°20.68′/W094°13.77′ |
| VPGTB | GARRETSBURG | N39°40.92′/W094°41.45′ |
| VPLAT | LATHROP WATER TANK | N39°32.87′/W094°20.00′ |
| VPLEN | LENEXA WATER TANK | N38°57.77′/W094°43.68′ |
| VPLVL | LONGVIEW LAKE | N38°54.63′/W094°28.28′ |
| VPMCL | MC LOUTH | N39°11.65′/W095°12.50′ |
| VPNHA | NASHUA | N39°17.83′/W094°34.80′ |
| VPSCX | SPORTS COMPLEX | N39°03.00′/W094°29.02′ |
| VPSKR | SUGAR CREEK REFINERY | N39°07.00′/W094°27.02′ |
| VPSPK | SWOPE PARK | N39°00.47′/W094°31.93′ |
| VPTSK | TWIN STACKS | N39°09.05′/W094°38.22′ |
| VPWOF | WORLDS OF FUN | N39°10.42′/W094°29.12′ |
| | LOS ANGELES HELICOPTER CHART | 0 /0 |
| | LOU ANGLEEU HELIOUI IEN UHANI | |
| VPANA | | N33°44.43′/W117°50.03′ |
| VPART | MAGNOLIA | N33°51.45′/W117°58.92′ |
| | | |

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION |
|----------------|---------------------------|------------------------|
| VPAUT | HWY 91 & 55 | N33°50.63'/W117°49.57' |
| VPBOB | | N33°59.60′/W117°21.45′ |
| VPCAR | | N33°49.90'/W118°17.23' |
| VPCNG | CONEJO GRADE US HWY 101 | N34°12.54′/W118°59.61′ |
| VPCOR | | N33°52.90′/W117°32.95′ |
| VPCRX | | N34°01.40′/W117°44.88′ |
| VPCSU | CSU CHANNEL ISLANDS | N34°09.76′/W119°02.53′ |
| VPDOW | | N33°56.47′/W118°05.80′ |
| VPELA | | N34°00.98′/W118°10.35′ |
| VPETY | | N33°38.70′/W117°44.12′ |
| VPFCB | | N34°02.03′/W118°01.63′ |
| VPFPL | OXNARD FINANCIAL PLAZA | N34°13.71′/W119°10.39′ |
| VPGOL | | N34°09.33′/W118°17.37′ |
| VPIMP | | N33°55.85′/W118°16.85′ |
| VPKAT | | N33°48.23′/W117°54.22′ |
| VPKEL | | N34°03.92′/W117°48.40′ |
| VPLAC | | N34°03.75′/W118°14.93′ |
| VPLLU | | N34°03.85′/W117°17.82′ |
| VPLQM | QUEEN MARY | N33°45.17′/W118°11.37′ |
| VPLRT | SANTA ANITA RACE TRACK | N34°08.45′/W118°02.65′ |
| VPLVT | VINCENT THOMAS BRIDGE | N33°44.97′/W118°16.32′ |
| VPMDR | | N33°59.27′/W118°23.97′ |
| VPNEW | | N34°20.18′/W118°30.72′ |
| VPNUY | | N34°09.63′/W118°28.18′ |
| VPPCH | | N33°28.07′/W117°40.32′ |
| VPPKC | | N34°03.32′/W118°12.83′ |
| VPPOR | | N34°00.10′/W117°50.12′ |
| VPRRT | | N33°59.37'/W118°16.83' |
| VPSEP | | N34°05.80′/W118°28.63′ |
| VPSFR | | N34°17.45′/W118°28.07′ |
| VPSTC | SATICOY BRIDGE | N34°16.62′/W119°08.34′ |
| VPSTK | | N34°13.97′/W118°24.60′ |

LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

| LUS ANGELES TERMINAL AREA CHART/FLTWAT CHART | | |
|--|---------------------------|------------------------|
| VPCNG | CONEJO GRADE US HWY 101 | N34°12.54′/W118°59.61′ |
| VPCSU | CSU CHANNEL ISLANDS | N34°09.76′/W119°02.53′ |
| VPLBP | BANNING PASS | N33°56.05′/W116°59.63′ |
| VPLCC | CHAFFEY COLLEGE | N34°08.87′/W117°34.33′ |
| VPLCP | CAJON PASS | N34°18.07′/W117°27.68′ |
| VPLDL | DISNEYLAND | N33°48.72′/W117°55.13′ |
| VPLDP | DANA POINT | N33°27.62′/W117°42.87′ |
| VPLDS | DODGER STADIUM | N34°04.42′/W118°14.42′ |
| VPLFX | 91/605 INTERCHANGE | N33°52.38′/W118°06.08′ |
| VPLGP | GRIFFITH PARK OBSERVATORY | N34°07.10′/W118°18.02′ |
| VPLHF | HARBOR/405 INTERCHANGE | N33°51.42′/W118°17.10′ |
| VPLHP | HUNTINGTON PIER | N33°39.32′/W118°00.25′ |
| VPLKH | KING HARBOR | N33°50.75′/W118°23.88′ |
| VPLLC | L.A. COLISEUM | N34°00.83′/W118°17.27′ |
| VPLLM | LAKE MATHEWS | N33°50.58′/W117°26.85′ |
| VPLMM | MAGIC MOUNTAIN | N34°26.20′/W118°36.28′ |
| VPLMS | MILE SQUARE PARK | N33°43.40′/W117°56.77′ |
| VPLPD | PRADO DAM | N33°53.40′/W117°38.48′ |
| VPLPP | PACIFIC PALISADES | N34°02.13′/W118°32.15′ |
| VPLQM | QUEEN MARY | N33°45.17′/W118°11.37′ |
| VPLRB | ROSE BOWL | N34°09.67′/W118°10.05′ |
| VPLRT | SANTA ANITA RACE TRACK | N34°08.45′/W118°02.65′ |
| VPLSA | SANTA ANA CANYON | N33°52.03′/W117°42.68′ |
| VPLSB | SANTA FE FLOOD BASIN | N34°07.72′/W117°57.30′ |
| VPLSC | STATE COLLEGE | N33°52.97′/W117°53.13′ |
| VPLSF | SAN FERNANDO RESERVOIR | N34°17.87′/W118°29.00′ |
| VPLSM | MULHOLLAND & 405 FREEWAY | N34°07.58′/W118°28.53′ |
| VPLSP | SIGNAL PEAK | N33°36.33′/W117°48.63′ |
| VPLSR | HAWTHORNE & 405 FREEWAY | N33°53.07′/W118°21.13′ |
| VPLSS | SANTA SUSANA PASS | N34°16.00′/W118°38.43′ |
| VPLTW | TUJUNGA WASH & FOOTHILL | N34°16.40′/W118°20.30′ |
| VPLVT | VINCENT THOMAS BRIDGE | N33°44.97′/W118°16.32′ |
| VPLWT | WATER TANK | N34°10.82′/W118°46.27′ |
| VPSTC | SATICOY BRIDGE | N34°16.62′/W119°08.34′ |

NEW ORLEANS SECTION CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION |
|----------------|---------------------------|------------------------|
| VPDAU | | N30°18.62′/W088°08.27′ |
| VPGPT | | N30°25.95′/W089°05.62′ |
| VPLIP | PHILLIPS INLET | N30°16.23′/W085°59.25′ |
| VPMAI | | N30°50.02′/W084°56.63′ |
| VPMOB | | N30°23.00′/W088°31.72′ |
| VPRAM | | N30°18.95′/W089°35.88′ |
| VPRER | | N30°13.87′/W085°20.67′ |
| VPRIV | | N30°54.85′/W087°57.82′ |
| VPSAW | | N30°49.65′/W089°07.42′ |
| VPTHR | | N30°19.93′/W087°08.50′ |

PHOENIX TERMINAL AREA CHART/FLYWAY CHART

| VPALL | ALLENVILLE | N33°20.97′/W112°35.20′ |
|-------|---------------------------|------------------------|
| VPAQU | AQUEDUCT PUMPING STATION | N33°40.05′/W112°41.38′ |
| VPARM | ARROWHEAD MALL | N33°38.52′/W112°13.48′ |
| VPAWG | AHWATUKEE GOLF COURSE | N33°19.98′/W111°59.08′ |
| VPAZM | ARIZONA MILLS | N33°23.43′/W111°57.88′ |
| VPBAR | BARTLETT DAM | N33°49.10′/W111°37.92′ |
| VPCCC | COUNTRY CLUB & CANAL | N33°30.73′/W111°50.37′ |
| VPFRB | FIREBIRD LAKE | N33°16.35′/W111°58.10′ |
| VPFTN | FOUNTAIN HILLS | N33°36.12′/W111°42.72′ |
| VPGLX | GILA CROSSING | N33°16.55′/W112°10.08′ |
| VPGPP | GLENDALE POWER PLANT | N33°33.27′/W112°13.00′ |
| VPMAR | MARICOPA | N33°03.42′/W112°02.88′ |
| VPMHS | MESQUITE HIGH SCHOOL | N33°20.53′/W111°49.58′ |
| VPNRV | NEW RIVER | N33°55.08′/W112°08.45′ |
| VPNTT | NORTH TEST TRACK | N33°03.50′/W111°55.83′ |
| VPQTR | QUINTERO GOLF COURSE | N33°49.53′/W112°23.58′ |
| VPRVC | RIO VERDE COMMUNITY | N33°44.37'/W111°39.62' |
| VPSMC | SOUTH MOUNTAIN COLLEGE | N33°23.02′/W112°02.12′ |
| VPSQP | SQUAW PEAK | N33°32.83′/W112°01.27′ |
| VPSSS | SUPERSTITION SPRINGS MALL | N33°23.50′/W111°41.37′ |
| VPSTN | SANTAN MOUNTAINS | N33°09.23'/W111°40.92' |
| VPSTT | SOUTH TEST TRACK | N32°56.25′/W111°59.67′ |
| VPZZZ | | N33°20.18′/W111°26.53′ |

ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

| VPAGN | TV ANTENNA | N38°32.08′/W090°22.42′ |
|-------|---------------------------|------------------------|
| VPBPE | | N38°23.80′/W090°20.38′ |
| VPCJY | HOLIDAY SHORES | N38°55.00′/W089°56.00′ |
| VPCOJ | WINFIELD DAM | N39°00.28′/W090°41.23′ |
| VPDFA | JEFFERSON BARRACKS BRIDGE | N38°29.18′/W090°16.47′ |
| VPEAZ | BUSCH STADIUM | N38°37.43′/W090°11.55′ |
| VPEDZ | WATER TANKS | N38°45.30′/W090°34.87′ |
| VPEGR | GAS TANKS | N38°35.80′/W090°19.32′ |
| VPEOX | ST PETERS | N38°47.17′/W090°39.25′ |
| VPFAI | HOWELL ISLAND | N38°40.00′/W090°43.00′ |
| VPFFY | | N38°55.37′/W090°17.30′ |
| VPGPF | | N38°35.60′/W090°26.92′ |
| VPGVI | | N38°32.30′/W090°27.80′ |
| VPHRQ | CHAIN OF ROCKS BRIDGE | N38°45.88′/W090°10.42′ |
| VPIB0 | WATERLOO | N38°20.00′/W090°09.00′ |
| VPJMU | HORSESHOE LAKE | N38°41.00′/W090°05.00′ |
| VPKNY | PACIFIC | N38°29.00′/W090°44.00′ |
| VPLES | ST CHARLES | N38°47.00′/W090°30.00′ |
| VPLIW | SIX FLAGS | N38°30.67′/W090°40.47′ |
| VPLXU | GATEWAY ARCH | N38°37.50′/W090°11.00′ |
| VPNSY | WOOD RIVER REFINERIES | N38°50.00′/W090°05.00′ |
| VPNZY | WENTZVILLE | N38°48.83'/W090°50.98' |
| VPRAZ | JERSEYVILLE | N39°07.00′/W090°20.00′ |
| VPRMO | FOREST PARK | N38°38.00′/W090°17.00′ |
| VPWKO | COLUMBIA | N38°27.00′/W090°12.00′ |
| VPXXI | MILLSTADT | N38°27.50′/W090°05.68′ |
| VPYID | MOSENTHEIN ISLAND | N38°43.00′/W090°12.25′ |

SALT LAKE CITY HELICOPTER CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION |
|----------------|---------------------------|------------------------|
| VPAIR | SALTAIR | N40°44.85'/W112°11.22' |
| VPBEE | SOUTH INTERCHANGE | N40°38.18'/W111°54.23' |
| VPBRN | BARN | N40°54.28′/W112°10.15′ |
| VPCAP | STATE CAPITOL | N40°46.67'/W111°53.25' |
| VPCHS | | N40°42.28'/W112°05.92' |
| VPCOP | BINGHAM COPPER MINE | N40°31.38'/W112°09.00' |
| VPCWY | CAUSEWAY | N41°05.37'/W112°07.17' |
| VPCYN | PARLEYS CANYON | N40°42.67'/W111°48.10' |
| VPFPC | FREE PORT CENTER | N41°05.92'/W112°02.27' |
| VPFPK | FRANCIS PEAK | N41°01.92'/W111°50.25' |
| VPGFS | GARFIELD STACK | N40°43.28'/W112°11.62' |
| VPHVE | SPAGHETTI BOWL | N40°43.50′/W111°54.22′ |
| VPJRT | JORDAN RIVER TEMPLE | N40°35.02′/W111°55.58′ |
| VPKSL | KSL ANTENNA | N40°46.80'/W112°05.80' |
| VPLGN | LAGOON AMUSEMENT PARK | N40°59.08'/W111°53.57' |
| VPMDH | MCKAY DEE HOSPITAL | N41°11.50′/W111°57.08′ |
| VPMMT | MICROWAVE TOWERS | N40°48.50′/W111°53.37′ |
| VPMSH | | N41°01.67'/W112°02.47' |
| VPNSL | | N40°50.15'/W111°54.90' |
| VPNTP | | N41°03.57'/W112°14.23' |
| VPOGE | GRAIN ELEVATOR | N41°13.13'/W112°00.45' |
| VPOPS | POWER STATION | N41°20.38'/W112°02.78' |
| VPPEN | STATE PRISON | N40°29.88'/W111°53.62' |
| VPPPT | PROMONTORY POINT | N41°12.28′/W112°25.73′ |
| VPPTM | POINT OF THE MOUNTAIN | N40°27.42′/W111°54.83′ |
| VPPVO | PROVO CANYON | N40°18.77'/W111°39.45' |
| VPRWY | | N40°48.48′/W112°00.33′ |
| VPSLC | I-15/I-80 INTERCHANGE | N40°45.83′/W111°54.85′ |
| VPTIP | SOUTH TIP | N40°50.93'/W112°10.92' |
| VPWBR | WEBER CANYON | N41°08.17′/W111°54.83′ |
| VPWBT | | N40°38.00′/W112°03.33′ |

SALT LAKE CITY TERMINAL AREA CHART

| SALTAIR | N40°44.85′/W112°11.22′ |
|-------------------------|---|
| SOUTH INTERCHANGE | N40°38.18′/W111°54.23′ |
| BARN | N40°54.28′/W112°10.15′ |
| STATE CAPITOL | N40°46.67′/W111°53.25′ |
| | N40°42.28'/W112°05.92' |
| BINGHAM COPPER MINE | N40°31.38′/W112°09.00′ |
| CENTERVILLE INTERCHANGE | N40°55.30′/W111°53.43′ |
| CAUSEWAY | N41°05.37'/W112°07.17' |
| PARLEYS CANYON | N40°42.67'/W111°48.10' |
| FREE PORT CENTER | N41°05.92'/W112°02.27' |
| FRANCIS PEAK | N41°01.92′/W111°50.25′ |
| GARFIELD STACK | N40°43.28'/W112°11.62' |
| SPAGHETTI BOWL | N40°43.50′/W111°54.22′ |
| JORDAN RIVER TEMPLE | N40°35.02′/W111°55.58′ |
| KSL ANTENNA | N40°46.80′/W112°05.80′ |
| LAGOON AMUSEMENT PARK | N40°59.08'/W111°53.57' |
| MCKAY DEE HOSPITAL | N41°11.50′/W111°57.08′ |
| MICROWAVE TOWERS | N40°48.50′/W111°53.37′ |
| | N41°01.67'/W112°02.47' |
| | N40°50.15′/W111°54.90′ |
| | N41°03.57′/W112°14.23′ |
| GRAIN ELEVATOR | N41°13.13'/W112°00.45' |
| POWER STATION | N41°20.38'/W112°02.78' |
| STATE PRISON | N40°29.88'/W111°53.62' |
| PROMONTORY POINT | N41°12.28′/W112°25.73′ |
| POINT OF THE MOUNTAIN | N40°27.42′/W111°54.83′ |
| PROVO CANYON | N40°18.77′/W111°39.45′ |
| | N40°48.48′/W112°00.33′ |
| I-15/I-80 INTERCHANGE | N40°45.83′/W111°54.85′ |
| SOUTH TIP | N40°50.93′/W112°10.92′ |
| U OF U EVENTS CENTER | N40°45.73′/W111°50.28′ |
| | SOUTH INTERCHANGE BARN STATE CAPITOL BINGHAM COPPER MINE CENTERVILLE INTERCHANGE CAUSEWAY PARLEYS CANYON FREE PORT CENTER FRANCIS PEAK GARRIELD STACK SPAGHETTI BOWL JORDAN RIVER TEMPLE KSL ANTENNA LAGOON AMUSEMENT PARK MCKAY DEE HOSPITAL MICROWAVE TOWERS GRAIN ELEVATOR POWER STATION STATE PRISON PROMONTORY POINT POINT OF THE MOUNTAIN PROVO CANYON 1-15/1-80 INTERCHANGE SOUTH TIP |

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION |
|----------------|---------------------------|------------------------|
| VPWBR | WEBER CANYON | N41°08.17′/W111°54.83′ |
| VPWBT | | N40°38.00′/W112°03.33′ |
| VPZ00 | HOGLE ZOO | N40°45.00′/W111°48.95′ |

SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

| VPLDP | DANA POINT | N33°27.62′/W117°42.87′ |
|-------|--------------------------|------------------------|
| VPLSP | SIGNAL PEAK | N33°36.33'/W117°48.63' |
| VPSBC | BARONA CASINO | N32°56.25'/W116°52.60' |
| VPSBL | | N33°05.18'/W117°18.55' |
| VPSBM | BLACK MOUNTAIN | N32°58.87'/W117°07.00' |
| VPSCF | | N32°48.55′/W117°09.17′ |
| VPSCM | COWLES MOUNTAIN | N32°48.72′/W117°01.97′ |
| VPSCP | CRYSTAL PIER | N32°47.77′/W117°15.42′ |
| VPSCR | BLUE CRANE | N32°39.37′/W117°07.30′ |
| VPSFB | IRON MOUNTAIN | N32°58.25′/W116°57.33′ |
| VPSLJ | LAKE JENNINGS | N32°51.53′/W116°53.28′ |
| VPSMB | | N32°45.57′/W117°12.22′ |
| VPSMS | MOUNT SOLEDAD | N32°50.40′/W117°15.10′ |
| VPSMT | MORMON TEMPLE | N32°51.97′/W117°13.73′ |
| VPSMV | | N32°45.75′/W117°09.80′ |
| VPSMW | MOUNT WOODSON | N33°00.52′/W116°58.23′ |
| VPSOP | OTAY MESA PRISON | N32°35.82′/W116°55.28′ |
| VPSOT | LOWER OTAY LAKE | N32°37.73′/W116°55.38′ |
| VPSPL | SOUTH POINT LOMA | N32°39.90′/W117°14.55′ |
| VPSPP | POWER PLANT | N33°08.25′/W117°20.23′ |
| VPSQS | QUALCOMM STADIUM | N32°46.98'/W117°07.23' |
| VPSRT | DEL MAR RACE TRACK | N32°58.58'/W117°15.95' |
| VPSSM | SAN MIGUEL MOUNTAIN | N32°41.78′/W116°56.18′ |
| VPSSV | SAN VICENTE ISLAND | N32°55.53′/W116°55.00′ |
| VPSTP | TORREY PINES GOLF COURSE | N32°54.17′/W117°14.68′ |
| VPSVA | | N33°11.48′/W117°16.38′ |

SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

| VPALT | ALTAMONT PASS | N37°44.35′/W121°35.42′ |
|-------|---------------------------|------------------------|
| VPANT | ANTIOCH BRIDGE | N38°01.45′/W121°45.02′ |
| VPBBR | BENICIA BRIDGE | N38°02.50′/W122°07.45′ |
| VPCAL | CALAVERAS RESERVOIR | N37°28.16′/W121°48.93′ |
| VPCBT | LAKE CHABOT | N37°43.68′/W122°06.94′ |
| VPCOY | COYOTE HILLS | N37°32.50′/W122°05.06′ |
| VPCQZ | CARQUINEZ BRIDGE | N38°03.66′/W122°13.52′ |
| VPCRL | | N37°11.00′/W121°41.06′ |
| VPCRY | CRYSTAL SPRINGS CAUSEWAY | N37°30.56′/W122°21.10′ |
| VPCSH | CAL STATE UNIVERSITY | N37°39.52′/W122°03.52′ |
| VPDAM | DEL VALLE DAM | N37°36.91′/W121°44.78′ |
| VPDLR | | N37°07.00′/W121°47.06′ |
| VPDUB | DUBLIN | N37°42.06′/W121°55.36′ |
| VPEMB | EMBASSY SUITES | N37°26.42′/W121°53.50′ |
| VPGGF | GOLDEN GATE FIELDS | N37°53.07′/W122°18.71′ |
| VPGIL | GILROY | N37°01.37′/W121°33.99′ |
| VPHHH | HAMILTON | N38°03.58′/W122°30.66′ |
| VPKGO | KGO | N37°31.58′/W122°06.10′ |
| VPLEX | LEXINGTON RESERVOIR | N37°11.66′/W121°59.18′ |
| VPMID | MID-SPAN SAN MATEO BRIDGE | N37°36.28′/W122°11.81′ |
| VPMOR | MORMON TEMPLE | N37°48.46′/W122°11.95′ |
| VPNUM | NUMMI PLANT | N37°29.56′/W121°56.58′ |
| VPPAC | | N37°38.00′/W122°32.07′ |
| VPPRU | PRUNEYARD | N37°17.33′/W121°56.01′ |
| VPSAR | SARATOGA | N37°15.26′/W122°02.33′ |
| VPSLA | SLAC/LINEAR ACCELERATOR | N37°24.75′/W122°14.35′ |
| VPSTB | STINSON BEACH | N37°54.45′/W122°40.41′ |
| VPSUN | SUNOL GOLF COURSE | N37°34.85′/W121°53.23′ |
| VPUTC | U.T.C. | N37°13.93′/W121°41.35′ |
| VPWAL | WALNUT CREEK | N37°53.78′/W122°04.30′ |
| VPWAM | | N37°30.28′/W122°10.00′ |
| VPWFR | CEMENT PLANT | N37°30.88′/W122°12.26′ |

INTENTIONALLY LEFT BLANK

VOR RECEIVER CHECK VOR RECEIVER CHECKPOINTS AND VOR TEST FACILITIES (VOT)

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed "Type of Checkpoint" & "Type of VOT Facility" G stands for ground. A/ stands for airborne followed by figures (2300) or (1000–3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

ARKANSAS

VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name) | Freq/Ident | Type Check Pt. Gnd. AB/ALT | Azimuth from Fac. Mag | Dist. from Fac. N.M. | Checkpoint Description |
|------------------------------|------------|--|--------------------------------|-------------------------------|--|
| Flippin | 112.8/FLP | A/1900 | 053 | 6.0 | Over water tower at Mountain Home. |
| Fort Smith (Fort Smith Rgnl) | 110.4/FSM | G | 226 | 5.2 | On runup area on twy to Rwy 25. |
| | 110.4/FSM | G | 232 | 6.2 | On runup area on twy to Rwy 07. |
| Gosnell | 111.8/GOJ | A/1700 | 105 | 7.3 | Over railroad bridge at Armorel. |
| Harrison (Boone County) | 112.5/HRO | G | 135 | 4.4 | At int of N/S and E/W twys by trml bldg. |
| Jonesboro (Jonesboro Muni) | 108.6/JBR | G | 227 | 3.9 | On SE corner of terminal ramp. |
| Little Rock (Adams Field) | 113.9/LIT | G | 312 | 3.8 | At intersection of Twys G and F |
| Pine Bluff (Grider Field) | 116.0/PBF | G | 183 | 4.5 | Center E/W twys front of twr. VOR ground receiver checkpoint unusable. |

LOUISANA

VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name) | Freq/Ident | Type Check Pt. Gnd. AB/ALT | Azimuth from Fac. Mag | Dist. from Fac. N.M. | Checkpoint Description |
|---------------------------------------|------------|--|--------------------------------|-------------------------------|--|
| Alexandria (Alexandria Intl) | 116.1/AEX | G | 328 | 4.3 | On runup Rwy 32. |
| Baton Rouge (Baton Rouge Metro, Ryan) | 116.5/BTR | A/1500 | 063 | 7.2 | Over water tank W side of arpt. |
| Downtown | 108.6/DTN | A/1500 | 290 | 10.0 | Over white water tower. |
| Lafayette (Lafayette RgnI) | 109.8/LFT | A/1000 | 343 | 22.1 | Over rotating beacon at St. Landry Parish–Ahart Fld. arpt. |

| | | Type | | | |
|------------------------------------|------------|--------|---------|-------|----------------------------------|
| | | Check | Azimuth | Dist. | |
| | | Pt. | from | from | |
| | | Gnd. | Fac. | Fac. | |
| Facility Name (Arpt Name) | Freq/Ident | AB/ALT | Mag | N.M. | Checkpoint Description |
| | 109.8/LFT | G | 355 | 0.5 | On Twy F run up area Rwy 04L. |
| | 109.8/LFT | G | 341 | 0.9 | On Twy B run up area Rwy 11. |
| | 109.8/LFT | G | 025 | 1.4 | On Twy J run up area Rwy 22L. |
| | 109.8/LFT | G | 039 | 0.8 | On Twy B run up area Rwy 29. |
| Lake Charles (Lake Charles Rgnl) | 113.4/LCH | A/1000 | 253 | 6.2 | Over rotg bcn on twr. |
| Monroe (Monroe Rgnl) | 117.2/MLU | G | 212 | 0.7 | On Twy G South of twr. |
| Natchez (Concordia Parish) | 110.0/HEZ | A/1000 | 247 | 10.5 | Over hangar NW end of fld. |
| Polk (Fort Polk AAF) | 108.4/FXU | A/2000 | 167 | 4.5 | Over water tower. |
| Reserve St John The Baptist Parish | 110.8 RQR | A/1500 | 270 | 16.8 | Over center of bridge. |
| Tibby (Houma-Terrebonne) | 112.0/TBD | A/1000 | 117 | 10.7 | Over intersection of Rwys |
| | | | | | 18-36 and 12-30. |
| Tibby (Thibodaux Muni) | 112.0/TBD | A/1000 | 353° | 5.0 | Over microwave twr near arpt. |
| | | | | | aipt. |

VOR TEST FACILITIES (VOT)

| Facility Name (Airport Name) | Freq. | Type VOT Facility | Remarks |
|---------------------------------|-------|----------------------|----------------------|
| New Orleans (Lakefront) | 111.0 | A/G | Within 5 NM radius |
| Shreveport Rgnl | 108.2 | G | between 2000'-3000'. |

NEW MEXICO

VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name) | Freg/Ident | Type Check Pt. Gnd. AB/ALT | Azimuth from Fac. Mag | Dist. from Fac. N.M. | Checkpoint Description |
|--------------------------------------|------------|--|--------------------------------|-------------------------------|--|
| racinty Name (Arpt Name) | rreq/ident | AD/ ALI | iviag | 14.141. | опескроппе Везсприоп |
| Carlsbad (Cavern City Air Terminal) | 116.3/CNM | G | 333 | 5.5 | On ramp in front of terminal. |
| Hobbs (Lea County Rgnl) | 111.0/HOB | G | 030 | 3.5 | On runup pad apch end Rwy 03. |
| Las Vegas (Las Vegas Muni) | 117.3/LVS | A/8500 | 233 | 6 | Over yellow water tank. |
| Roswell (Roswell Intl Air Center) | 116.1/CME | G | 100 | 5.2 | On middle of W ramp adjacent to twy. |
| Santa Fe (Santa Fe County Muni) | 110.6/SAF | G | 334 | 4.7 | At junction main intersection of twy and ramp. (Checkpoint unusable.) |
| Silver City (Silver City – Grant Co) | 110.8/SVC | G | 100 | 0.9 | Twy entrance to Rwy 26 just west of approach end. |
| Texico (Clovis Muni) | 112.2/TX0 | A/6000 | 240 | 12.7 | Over rotating beacon on steel twr adjacent to terminal bldg. |
| Truth or Consequences (Truth or | | | | | |
| Consequences 3 Muni) | 112.7/TCS | G | 155 | 3.2 | Runup pad Rwy 31. |
| Tucumcari (Tucumcari Muni) | 113.6/TCC | G | 258 | 0.5 | 100' in front of terminal on twy. |

VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

Facility Name Type VOT (Airport Name) Freq. Facility

Remarks

Albuquerque Intl. Sunport...... 111.0

OKLAHOMA

G

VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name) | Freq/Ident | Type Check Pt. Gnd. AB/ALT | Azimuth from Fac. Mag | Dist. from Fac. N.M. | Checkpoint Description |
|-------------------------------------|------------|--|--------------------------------|-------------------------------|--|
| Ada | 117.8/ADH | A/2000 | 036 | 5.8 | Over railroad and east/west highway in center of town of Francis. |
| Ardmore (Ardmore Muni) | 116.7/ADM | A/2000 | 045 | 8.4 | Over red and white water tower W side of arpt. |
| Bartlesville (Bartlesville Muni) | 117.9/BVO | G | 166 | 4.5 | On parallel twy opposite terminal. OTS indef. |
| Duncan (Halliburton Field) | 111.0/DUC | G | 327 | 5.8 | At compass rose. |
| Glenpool (Richard Lloyd Jones Jr) | 110.6/GNP | A/2500 | 348 | 7.2 | Over intersection of rwy south Rwy 13 and Rwy 19R. |
| Hobart | 111.8/HBR | A/3500 | 343 | 9 | Railroad intersection east side of city. |
| Lawton (Lawton-Fort Sill Rgnl) | 109.4/LAW | G | 349 | 4.6 | On taxiway between terminal and Rwy 17-35. |
| McAlester (McAlester Rgnl) | 112.0/MLC | G | 350 | 2 | At intersection of ramp and twy. |
| Okmulgee (Okmulgee Rgnl) | 114.9/OKM | A/2200 | 279 | 10.2 | Over intersection N/S railroad and E/W highway. |
| Pioneer (Ponca City Rgnl) | 113.2/PER | G | 089 | 2.9 | At AER 17 on Twy A. |
| | | G | 107 | 3.2 | South on Twy A. |
| Sayre (Sayre Muni) | 115.2/SY0 | A/3000 | 175 | 10.4 | VOR ground receiver checkpoints unusable. Over rotating beacon. |
| Stillwater (Stillwater Rgnl) | 108.4/SWO | G | 176 | 4 | At intersection of NW ramp and twy D. |
| Wiley Post (Wiley Post) | 113.4/PWA | G | 157 | 0.5 | On runup pad to Rwy 35R. |
| Will Rogers (Clarence E. Page Muni) | 114.1/IRW | A/2900 | 297 | 12.8 | Over apch end Rwy 35L. |
| Woodring (Enid Woodring Rgnl) | 109.0/ODG | G | 352 | .5 | On ramp W of terminal. |

VOR TEST FACILITIES (VOT)

| Facility Name (Airport Name) | Freq. | Type VOT Facility | Remarks |
|-----------------------------------|-------|----------------------|---|
| Oklahoma City (Will Rogers World) | 108.8 | A/G | Within 10 NM radius between 3000' and 5000' VOT unusable on Twy H and Rwy 17L–35R N of Twy H–2 and Twy E N of Twy E–2/E–3 junction. |

Tulsa International 109.0

VOR RECEIVER CHECK TEXAS

VOR RECEIVER CHECKPOINTS

| | | Type Check Pt. Gnd. | Azimuth from Fac. | Dist. from Fac. | |
|--------------------------------------|------------|------------------------------|-------------------------|-----------------------|---|
| Facility Name (Arpt Name) | Freq/Ident | AB/ALT | Mag | N.M. | Checkpoint Description |
| Abilene (Abilene Rgnl) | 113.7/ABI | A/2800 | 047 | 10.1 | Over silos in center of Ft Phantom Lake. |
| Alice (Alice International) | 114.5/ALI | G | 272 | 0.5 | On twy near FBO. |
| Beaumont (Southeast Texas Reg) | 114.5/BPT | G | 309 | 0.8 | On runup area for Rwy 12. |
| Borger (Hutchinson Co) | 108.6/BGD | G | 173 | 6.7 | On twy intersection at N end of ramp. |
| Brownsville (Brownsville/South Padre | | | | | |
| Island Intl) | 116.3/BRO | G | 247 | 3.2 | On hold line Rwy 13. |
| Brownwood (Brownwood Rgnl) | 108.6/BWD | A/2600 | 169 | 6.2 | Over rotating bcn. |
| Childress (Childress Muni) | 117.6/CDS | G | 353 | 3.7 | At intersection of edge of ramp at center twy. |
| College Station (Easterwood Field) | 113.3/CLL | G | 097 | 3.2 | On W edge of parking ramp. |
| Corpus Christi (Corpus Christi Intl) | 115.5/CRP | A/1100 | 187 | 7.5 | Over grain elevator. |
| Corpus Christi (San Patricio County) | 115.5/CRP | A/1000 | 318 | 9.5 | Over rotating beacon on arpt. |
| Daisetta (Liberty Muni) | 116.9/DAS | A/1200 | 195 | 7.5 | Over hangar S of arpt. |
| Dalhart (Dalhart Muni) | 112.0/DHT | A/5000 | 176 | 4.1 | Over water tower on arpt. |
| Eagle Lake (Eagle Lake) | 116.4/ELA | A/1200 | 180 | 4.1 | Over water tank 0.4 NM SW of arpt. |
| Fort Stockton (Fort Stockton-Pecos | | | | | |
| County) | 116.9/FST | G | 116 | 4.0 | On ramp N of terminal building. |
| Gray (Killeen Muni) | 111.8/GRK | G | 056 | 7.6 | On N end runup pad. |
| Gregg Co (East Texas Rgnl) | 112.3/GGG | G | 128 | 2.4 | At N end of ramp on twy to Rwy 13. |
| Humble (George Bush | | | | | |
| Intercontinental/Houston) | 116.6/IAH | G | 339 | 2.2 | On runup pad Rwy 08. |
| Laredo (Laredo International) | 117.4/LRD | G | 313 | 4.1 | On runup area of Twy F. |
| | 117.4/LRD | G | 318 | 4.8 | On runup area of Twy A. |
| Laughlin (Del Rio Intl) | 114.4/DLF | A/2000 | 268 | 7.7 | Over rotating bcn. |
| | 114.4/DLF | G | 198 | .5 | On ramp AER 31L. |
| | 114.4/DLF | G | 275 | .9 | On ramp AER 13R. |
| Lubbock | 109.2/LBB | A/4500 | 053 | 4.5 | Over water tank at intersection of railroad & road in New Deal. |
| Lufkin (Angelina County) | 112.1/LFK | A/1300 | 331 | 4.6 | Over rotating bcn. |
| Marfa (Marfa Muni) | 115.9/MRF | A/6000 | 280 | 4 | Over gray–white silo or |
| , | • | , | | | water tank north edge of town. |
| McAllen (McAllen Miller Intl) | 117.2/MFE | G | 329 | 0.6 | NM run up area Rwy 13. |
| Midland | 114.8/MAF | A/4000 | 224 | 11 | Over Odessa water tank. |
| Midland (Midland Intl) | 114.8/MAF | G | 180 | 4.4 | At intersection of twy C and ramp in front of |
| | | | | | terminal building |
| Millsap (Mineral Wells) | 117.7/MQP | A/2000 | 329 | 6.0 | Over spillway of lake N of Mineral Wells arpt. |
| Paris (Cox Fld) | 113.6/PRX | G | 348 | 5.6 | At intersection of ramp and E/W twy. |
| Pecos | 111.8/PEQ | A/3600 | 105 | 5.5 | Over 419' transmission twr E of town of Pecos. |
| Quitman | 114.0/UIM | A/1500 | 241 | 14.5 | Over water tank in Alba. |

| | VUR RECEIVER CHECK | | | | 411 | |
|--|--------------------|--|--------------------------------|-------------------------------|---|--|
| Facility Name (Arpt Name) | Freq/Ident | Type Check Pt. Gnd. AB/ALT | Azimuth from Fac. Mag | Dist. from Fac. N.M. | Checkpoint Description | |
| Rocksprings | 111.2/RSG | A/3800 | 085 | 4.8 | Over 2804' antenna S of | |
| San Angelo (San Angelo Rgnl/Mathis | 115.1/SJT | G | 237 | 2.6 | Rocksprings. On E edge of ramp in front | |
| Field) | 113.0/VUH | G | 138 | .8 | of atct. Taxiway/runup area East of Rwy 35 thld. | |
| Stinson (Stinson Muni) | 108.4/SSF | A/2000 | 337 | 5.0 | Over atct. | |
| Sulphur Springs | 109.0/SLR | A/1600 | 223 | 7 | Over projector booth and snackbar within outdoor theater. | |
| Temple (Draughon–Miller Central Texas Rgnl) | 110.4/TPL | G | 160 | 3.6 | At edge of ramp and twy in front of refueling office. | |
| Tyler (Tyler Pounds Rgnl) | 114.2/TYR | G | 082 | .5 | At intersection twys D and H | |
| Victoria (Victoria Rgnl) | 109.0/VCT | G | 128 | 3.2 | At approach end of Rwy 12L. OTS indef. | |
| Wichita Falls | 112.7/SPS | A/2000 | 228 | 19.8 | Over spillway at Lake Diversion. | |
| Wichita Falls (Sheppard AFB/Wichita Falls | | | | | | |
| Muni) | 112.7/SPS | G | 091 | 5.5 | On Twy C runup area Rwy 33L. | |
| | 112.7/SPS | G | 074 | 5.3 | On Twy G AER 33R. | |
| | 112.7/SPS | G | 064 | 5.2 | On Twy K AER 15L. | |
| | 112.7/SPS | G | 068 | 4.7 | On Twy H runup area Rwy 15R. | |
| | 112.7/SPS | G | 094 | 5.3 | On Twy E runup area Rwy 17. | |
| | 112.7/SPS | G | 097 | 5.0 | On Twy C runup area Rwy 35. | |
| Wink (Winkler County) | 112.1/INK | A/3900 | 149 | 5.9 | Over intersection of rwys 04–22 and 13–31. | |
| V | OR TEST FA | ACILITIES | (VOT) | | | |
| Facility Name | | Type VOT | | | | |
| (Airport Name) | Freq. | Facility | | | Remarks | |
| Dallas Love Field | 113.3 | A/G | | | Airborne, use within 10 NM radius of Dallas Love field between 2000' and 10000'. | |

| Facility Name | | Type VOT | |
|----------------------------|-------|----------|--|
| (Airport Name) | Freq. | Facility | Remarks |
| Dallas Love Field | 113.3 | A/G | Airborne, use within 10 NM radius of Dallas Love field between 2000' and 10000'. |
| El Paso International | 111.0 | A/G | Used for ground only. Unusable on the west side of hangers south of the intersection of Twy A and the centerline of Rwy 04–22. |
| Fort Worth Meacham Intl | 108.2 | G | Used for ground and airborne test. For airborne use within 10 NM radius of Fort Worth Meacham Intl clockwise fr 220°–310° between 2000′ and 5700′. |
| Houston (William P. Hobby) | 108.4 | G | |
| Midland Intl | 108.2 | G | |
| San Antonio International | 110.4 | G | |

PARACHUTE JUMPING AREAS

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FAA facility (FSS, tower, or ARTCC).

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

- (1) Been in operation for at least 1 year.
- (2) Operate year round (at least on weekends).
- (3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

| LOCATION | DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC | MAXIMUM ALTITUDE | REMARKS |
|---|---|---------------------|---|
| | ARKANSAS | | |
| c) Blackjack Drop Zone | 33 NM; 009° Little Rock | 3,000 | Mon-Fri 0600-0200 and |
| | | | occasional weekends. Extensive |
| | | | activity, personnel and cargo, |
| | | | including instrument |
| | | | meteorological conditions drops. |
| amp Chaffee, Arrowhead Drop Zone | 6 NM; 160° Ft. Smith | 3,000 | Mon-Fri 0600-2300 and |
| | | | occasional weekends. |
| amp Kobinson-Ali American Drop Zone | 15 NM; 332° Little Rock | 3,000 | Mon–Fri 0600–0200 and |
| | | | occasional weekends. Extensive |
| | | | activity, personnel and cargo, |
| | | | including instrument meteorological conditions drops. |
| onway Dron Zone | 24 NM; 334° Little Rock | 12,500 | 0800–SS weekends and |
| onway brop conc | 24 NW, 334 EIRIC NOCK | 12,500 | occasional weekdays. |
| c) Hazen Muni | 27 NM; 073° Little Rock | 15,000 | 2 NM radius. Sat SR-midnight, |
| -, | | | Sun and holidays SR-SS. |
| c) Siloam Springs Muni | 18 NM; 256° Razorback | 15,000 | 5 NM radius. Sat-Mon |
| | | | 0700-0000. |
| exarkana | 9 NM; 160° Texarkana | 13,000 AGL | 0800-SS weekends and |
| | | | occasional weekdays |
| | LOUISIANA | | |
| c) Baton Rouge | 13NM; 060° Baton Rouge | 13,000 | Daily SR-SS |
| | 2 NM; 054° Harvey | 7,500 | Daily SR-SS |
| | 16 NM; 083° Shreveport | 13,000 | Daily SR-SS |
| | 9 NM; 042° Lafayette | 12,000 | Daily SR-SS |
| | 25 NM; 133° Lafayette | 12,500 | 5 NM Radius Wed, and weekends. |
| c) Mansfield, De Soto Parish Arpt c) Opelousas, St Landry Parish—Ahart | 22 NM; 196° Elm Grove | 13,000 | 3 NM radius. Daily SR-SS |
| Fld | 25 NM; 340° Lafayette | 11,500 | 3NM radius. Weekends 0700-180 |
| | 14 NM; 160° Belcher | 15,000 | 1 NM radius. Continuous. |
| moropoit bountoun Aipt | | 10,000 | 1 NW radius. Continuous. |
| lhumunamuna | NEW MEXICO | 40.000 | We should and halidans |
| Ibuquerque | 6 NM; 050° Albuquerque 17 NM; 140° Albuquerque | 18,000 17,000 | Weekends and holidays SR-SS weekends |
| c) Belen, Alexander Muni | | 16,000 | 1 NM radius. Daily SR–SS. |
| c) Santa Teresa, Dona Ana Co at Santa | 12.1, 0.10 0000.10 1 | 10,000 | 1 mm radices bany en een |
| * | 22 NM; 268° El Paso | 13,000 | 1 NM radius. SR-SS Sat-Sun. S |
| • | | | side of arpt. |
| | OKLAHOMA | | |
| c) Chickasha, Redhills Arnt | 23 NM; 212° Will Rogers | 12,000 | 1 NM radius. Daily SR-SS. |
| | 7.8 NM; 070° Tulsa | 11,000 | 2 NM radius. Weekends, and |
| | • | • | holidays, SR-SS. Occasional |
| | | | weekday and night jumps. |
| c) Cushing Muni | 50 NM; 245° Tulsa | 14,000 | 5 NM radius SR until 1 hour after |
| | | | SS daily. |
| c) Eldorado, Sooner Drop Zone | 22 NM; 247° Altus | 12,500 AGL | 1 NM radius, Mon-Fri 0700-0200 |
| | | | and occasional weekends. Heavy |
| | | | 1 / // // /ED ///ED |
| | | | jet activity, IFR and VFR |

| LOCATION | DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC | MAXIMUM ALTITUDE | REMARKS |
|---|--|---------------------|---|
| (c) Goldsby, Pardise Air Haven Arpt | | 17,000 | 3 NM radius. Continuous. |
| (c) Grandfield Muni | 21 NM; 324° Wichita Falls | 13,500 | 5 NM radius. SR-SS weekends and holidays; occasional weekdays. |
| (c) Hinton Muni Arpt | 37 NM; 277° Will Rogers | 16,000 | 3 NM radius. Weekends SR-SS. |
| (c) Hugo, Nash Muni Arpt Ketchum Craig Co South Grand Lake | | 13,000 | 3 NM radius. Daily SR-SS. |
| | 34 NM; 230° Neosho | 12,000 | 1 NM radius. Daily 0530-2000. |
| Miami Muni Arpt | 21 NM; 126° Oswego | 13,000 | 3 NM radius. SR-SS daily. |
| Okmulgee Rgnl Arpt | 4.3 NM; 241° Okmulgee | 15,000 | 3 NM radius. Sat, Sun and holidays SR-SS. |
| | 25 NM; 270° Fort Smith | 15,000 | 3 NM radius. Continuous. |
| (c) Skiatook | 15 NM; 310° Tulsa | 13,000 | 5 NM radius. Daily SR-SS, occasional ngts. |
| Tahlequah Muni | 41 NM; 105° Tulsa | 13,500 | 5 NM radius. Daily SR-SS. |
| | TEXAS | | |
| Abilene Duren AFD | | 0.000 | Delle OD OO |
| Abilene, Dyess AFB | | 3,300 | Daily SR-SS |
| | 13.5 NM; 213° Panhandle | 15,000 | Daily SR-SS |
| | 14.5 NM; 013° Trinity | 17,500 | 5 NM radius. Daily SR–SS. Occasional ngts. |
| | 12.5 NM; 297° Beaumont | 15,000 AGL | 0800–1 hour past SS, occasional ngts. |
| (c) Beeville | | 12,500 | 0900–SS weekends, holidays and occasional weekdays. |
| (c) Brookshire, Sport Flyers (Pvt) Arpt | | 12,000 | 3 NM radius. Daily 1500-0045. |
| (c) Brownsville/South Padre Island Intl Arpt | 15 NM, 045° Brownsville | 15,500 | 5 NM radius. Daily SR–SS. Occasional ngts. Houston Center 119.5 |
| (c) Bryan, Coulter Fld | 8 NM; 026° College Station | 13,500 | 5 NM radius. Daily SR–SS, occasional ngts, occasional weekdays Wed–Fri. Houston Center 120.4 |
| (c) Caddo Mills | 29 NM; 176° Bonham | 15,000 | Fri-Sun dalgt hrs, 0600–2100 during summer. UNICOM 122.8/Fort Worth Center 132.02. |
| Camp Bullis | 6.5 NM; 305° San Antonio | 2,500 AGL | 2 NM radius. Continuous. |
| (c) Camp Swift, Blackwell Drop Zone | 15 NM; 119° Centex | 1,500 AGL | Daily, occasional ngts. |
| | 6.8 NM; 055° Centex | 13,500 | 3 NM radius. Continuous. Austin–Bergstrom Intl APP CON 118.8. |
| Dumas, Moore Co Arpt | 29 NM; 106° Dalhart | 13,700 | 3 NM radius. SR-2359 weekends and holidays, 1700-2359 weekdays. |
| Ennis Muni Arpt | 24 NM; 285° Cedar Creek | 12,000 | 3 NM radius, Sat-Sun, Holidays |
| | 38.7 NM; 193° Centex | 14,000 | 5 NM radius. Weekends SS–SR. Occasional weekdays and ngt jumps. Austin–Bergstrom Intl Tower 119.0 |
| (c) Gladewater Muni Arpt | 14 NM; 295° Gregg Co | 14,000 | 3 NM radius. 0700-2200 daily. |
| (c) Granbury Muni Arpt | 17.3 NM, 004° Glen Rose | 14,000 | 5 NM radius. 0800–2100 Fri–Sun, ocnl weekdays. |
| (c) Hitchcock, Johnnie Volk Fld (c) Killeen, Ft. Hood, | 8.5 NM; 302° Scholes | 12,500 AGL | 1 NM radius 0800-SS daily. |
| Antelope Drop Zone(c) Killeen, Ft. Hood, | 14.5 NM; 084° Lampasas | 13,000 AGL | Continuous |
| | 25 NM; 050° Lampasas | 13,000 AGL | 0.5 NM radius. Continuous. |
| | 11.5 NM; 175° Alice | 12,500 | Weekdays, 1200-SS; Sat, Sun, holidays 0700-SS |
| (c) Lexington Airfield (Pvt) Arnt | 30 NM; 238° College Station | 15,500 | 2 NM radius, Daily SR–SS. |
| | 7 NM; 084° Stinson | 15,000 | NM radius. Daily SR–SS and occasional ngts. |
| (c) Nome, Farm Air Service (Pvt) Arpt | 21 NM; 278° Beaumont | 13,500 | 3 NM radius. Sat, Sun and holidays, SR–SS. |
| (c) Port Isabel-Cameron Co Arpt | 15 NM; 357° Brownsville | 15,500 | 1 NM radius. Daily SR–SS. Houston Center 119.5 |

PARACHUTE JUMPING AREAS

| LOCATION | DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC | MAXIMUM ALTITUDE | REMARKS |
|--|--|---------------------|--|
| (c) Rosharon, B&B Airpark (Pvt) Arpt | 20 NM; 205° Hobby | 15,000 | 2 NM radius. 1200-0200 daily. |
| (c) Salado Arpt | 15.5 NM; 114° Gray | 15,000 AGL | 5 NM radius. Continuous. |
| Seagoville Arpt | 30.3 NM; 115° Maverick | 13,000 | SR-SS weekends and holidays and occasional days. |
| (c) Stanton Muni | 21 NM; 051° Midland | 14,500 | 5 NM radius. SR-SS weekends and holidays. |
| Stephenville, Clark Fld Muni | 15.5 NM; 279° Glen Rose | 13,000 | 5 NM radius. Daily 0800-2100. |
| | | | Ft. Worth Center 127.15 |
| Terrell Muni Arpt | 32 NM; 349° Cedar Creek | 13,500 | 2 NM radius. SR-SS weekends and holidays, occasional weekdays. |
| (c) Trenton, Tri–Co Aerodrome | 8.6 NM; 230° Bonham | 14,500 | 2 NM radius. Daily 0800–2200. Hi–density jump area, pilots are advised to monitor UNICOM 123.075. |
| (c) Waller, Skydive Houston (Pvt) Arpt | 18.9 NM, 151° Navasota | 24,000 AGL | 3 NM radius, continuous. |

AERONAUTICAL CHART BULLETIN

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot; major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain the chart current. When the Aeronautical Chart is republished, the corrective tabulation will be removed from this Bulletin. Inasmuch as this Bulletin provides major changes only; pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult appropriate Sectional and Terminal Area Charts for revisions. NOTE: New data which have been added to this issue are shown below the rule line under the appropriate chart.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts and VFR Terminal Area Charts. Only the route centerline, direction of flight and the route designator are shown —route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

ALBUQUERQUE SECTIONAL 78th Edition, October 26, 2006

Add obst 6389'MSL (328'AGL)UC, 34°48'21"N, 105°07'44"W. Add obst 6347'MSL (328'AGL) UC,34°48'07"N, 105°06'50"N. Add obst 6265'MSL (328'AGL) UC, 34°49'08"N, 105°04'26"W. Add obst 6166'MSL (328'AGL) UC, 34°50'06"N, 104°59'09"W. Revise CLOVIS, NM. Class D: That airspace extending upward from the surface to and including 6,800 feet MSL within a 6-mile radius Cannon AFB. The Class D airspace area is effective during the specific dates and times established in advance by the Notice to Airmen. The effective time will thereafter be continuously published in the Airport/Facility Directory. Revise CLOVIS, NM. Class E: That airspace extending upward from the surface within a 6-mile radius of Cannon AFB. The Class E airspace area is effective during the specific dates and times established in advance by the Notice to Airmen. The effective time will thereafter be continuous published in the Airport/Facility Directory.

Military Training Routes

No Changes

BROWNSVILLE SECTIONAL 78th Edition. November 23, 2006

No major changes.

Military Training Routes

No Changes

DALLAS-FT. WORTH HELICOPTER CHART 4th Edition, March 16, 2006

Change MEF 14 to 15 in quadrant 33°15′-33°30′N, 96°15′-96°30′W.

Add obst 1049'MSL (318'AGL), 33°12'08"N, 96°48'14"W. Add LANCASTER NDB, freq. 239, ident (LNC), 32°34'39"N, 96°43'17"W.

Delete TURBOMECA heliport, 32°41′54″N, 97°02′59″W. Delete TRIPLE S arpt, 32°40′30″N, 97°34′54″W.

Add obst 975'MSL (470'AGL), 32°51'03"N, 96°35'30"W. Delete CARROLL arpt 32°33'25"N, 96°51'56"W.

Military Training Routes

No Changes

DALLAS-FT. WORTH SECTIONAL 77th Edition, September 28, 2006

Delete Bristow NDB, 35°46′11″N, 96°25′29″W. Add obst 1820′MSL (254′AGL), 34°59′10″N, 99°14′50″W. Add obst 1840′MSL (305′AGL), 35°32′03″N, 98°34′28″W. Add obst 1312′MSL (204′AGL), 35°11′27″N, 97°16′55″W. Add obst 1368′MSL (355′AGL), 36°06′27″N, 97°39′24′W. Add obst 1805′MSL (274′AGL), 35°23′32″N, 98°58′59″W. Add obst 1210′MSL (274′AGL), 35°17′56″N, 99°05′44″W. Add obst 2176′MSL (294′AGL), 35°18′03″N, 99°24′03″W. Add obst 1785′MSL (275′AGL), 34°25′21″N, 99°01′35″W. Add obst 1400′MSL (295′AGL), 34°27′08″N, 97°50′36″W. Add obst 1402′MSL (307′AGL), 34°22′12″N, 98°22′08″W. Add obst 1930′MSL (309′AGL), 34°36′34″N, 99°50′58″W. Add obst 1885′MSL (305′AGL) UC, 35°32′09″N, 98°09′58″W. Add obst 1930′MSL (3032′AGL) UC, 32°07′14′N, 95°41′02′W. Add obst 1049′MSL (482′AGL) UC, 32°02′42″N, 95°40′38″W. Add obst 1928′MSL (295′AGL), 35°04′24″N, 98°58′49″W. Add obst 1471′MSL (305′AGL), 35°04′50′N, 98°05′11″W. Add obst 9936′MSL (415′AGL) UC, 32°18′15″N, 100°13′06″W. Add obst 2934′MSL (415′AGL) UC, 32°16′02″N, 100°12′22″W. Add obst 2933′MSL (415′AGL) UC, 32°16′02″N, 100°11′39″W. Add obst 2934′MSL (415′AGL) UC, 32°16′02″N, 100°11′39″W. Add obst 2931′MSL (415′AGL) UC, 32°16′02″N, 99°39′59″W. Add obst 2049′MSL (254′AGL), 32°23′05″N, 99°34′30″W. Add obst 1713′MSL (214′AGL) UC, 34°39′35″N, 99°39′59″W. Add obst 2049′MSL (254′AGL), 32°33′33″N, 99°34′00″W. Add obst 274′00″W. Add obst 274′40″W. Add obst 274′40″W. Add obst 274′40″W. Add obst 274′40″W. Add obst 274′40″MSL (214′40″MSL (214′40″MSC (214′40″MSC (214′40″MSC (214′40″MSC (214′40″MSC (214′40″MSC (214′40″MSC (

Military Training Routes

No changes

DALLAS-FT. WORTH TERMINAL AREA CHART 68th Edition, September 28, 2006

No major changes.

Military Training Routes

No Changes

DENVER SECTIONAL 75th Edition, August 3, 2006

Add obst 6135'MSL (226'AGL), 35°48'36"N, 105°05'10"W.

Revise EAGLE, CO. Class E: That airspace extending upward from the surface of the earth within a 4.4-mile radius of Eagle County Regional Airport, and within 4.0 miles each side of the 079° bearing extending from the 4.4-mile radius to 16.5 miles east of the Eagle County Regional Airport. This Class E airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory. Revise EAGLE, CO. Class E: That airspace extending upward from 700 feet above the surface within a 10-mile radius of Eagle County Regional Airport; within 9.5 miles north and 6 miles south of the 085° bearing from the Eagle County Regional Airport extending from the 10-mile radius area to 22.5 miles northeast of the airport.

Military Training Routes

No Changes

EL PASO SECTIONAL 77th Edition, August 3, 2006

No major changes.

Military Training Routes

No Changes

HOUSTON HELICOPTER CHART 5th Edition, September 30, 2004

Change obst from 411'MSL (359'AGL)UC to 463'MSL (410'AGL), 29°55'57"N, 94°54'52"W.

Add obst 313'MSL (306'AGL)UC, $29^{\circ}12'39''N$, $94^{\circ}56'18''W$. Change MEF 0^4 to 0^5 in quadrant $29^{\circ}00'N-29^{\circ}15'N$, $94^{\circ}45'W-95^{\circ}00'W$.

Change GEORGE BUSH INTERCONTINENTAL/HOUSTON ATCT frequency from 118.175 to 120.725.

Delete LAKESIDE NDB, 29°48′59"N, 95°40′40"W.

Add SCHOLES INTL AT GALVESTON ATCT 120.575, 29°15′55″N, 94°51′37″W. Change CTAF 123.05 to 120.575 at SCHOLES INTL AT GALVESTON arpt, 29°15′55″N, 94°51′37″W. Delete SANDY POINT NDB, 29°30′08″N, 95°28′06″W. Add GALVESTON, TX Class D: That airspace extending upward from the surface up to but not including 2,500 feet MSL within a 4.1-mile radius of Scholes INTL at Galveston, Galveston, TX. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory. Revise GALVESTON, TX Class E: That airspace extending upward from the surface within a 4.1-mile radius of Scholes INTL at Galveston, Galveston, TX. This Class E airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will thereafter be continuously published in the Airport/Facility Directory.

Delete PONDEROSA LAKES heliport, 30°01′25″N, 95°28′20″W. Delete ASC heliport, 29°41′09″N, 95°27′23″W. Delete HERMAN HOSPITAL heliport, 29°43′09″N, 95°24′09″W. Delete abandoned arpt symbol, 29°30′30″N, 95°03′15″W.

Delete DUDLEY heliport 29°38'04"N, 95°16'20"W.

Military Training Routes

No Changes

HOUSTON SECTIONAL 78th Edition. September 28, 2006

Delete COW PASTURE arpt, 30°37′30″N, 34°23′35″W. Change AIR RICE arpt to HOUSTON EXECUTIVE arpt and change CTAF 122.9 to 122.975, 29°48′25″N, 95°53′52″W. Add CTAF freq. 122.9 at COVEY TRAILS arpt, 29°41′23″N, 95°50′22″W. Add obst 472′MSL (290′AGL)UC, 30°11′35″N, 95°538′36″W. Add obst 837′MSL (332′AGL) UC, 32°07′14″N, 95°61′22″W. Add obst 1049′MSL (482′AGL) UC, 32°02′42″N, 95°40′38″W. Add obst 532′MSL (338′AGL) UC, 31°32′16″N, 93°39′52′W. Add obst 542′MSL (350′AGL) UC, 31°08′27″N, 91°09′49°W. Add obst 385′MSL (256′AGL) UC, 30°42′32″N, 91°09′49°W. Add obst 377′MSL (306′AGL) UC, 30°42′32″N, 91°57′00″W. Add obst 706′MSL (306′AGL) UC, 31°12′55″N, 90°44′13″W. Add obst 687′MSL (430′AGL) UC, 31°43′54″N, 93°55′55″W. Add obst 562′MSL (265′AGL) UC, 30°19′30″N, 95°38′55′W. Add obst 469′MSL (306′AGL) UC, 31°10′54″N, 91°17′14″W. Add obst 512′MSL (311′AGL) UC, 31°23′50″N, 95°38′59″W. Add obst 430′MSL (225′AGL) UC, 30°13′20″N, 95°33′07″W. Add obst 613′MSL (340′AGL) UC, 30°23′50″N, 95°49′519′42″W. Add obst 490′MSL (265′AGL) UC, 30°08′09″N, 95°40′51″W. Add obst 525′MSL (350′AGL), 31°03′06″N, 92°43′17″W.

Military Training Routes

No Changes

HOUSTON TERMINAL AREA CHART 66th Edition. September 28, 2006

Change AIR RICE arpt to HOUSTON EXECUTIVE arpt and change CTAF 122.9 to 122.975, 29°48′25″N, 95°53′52″W. Add CTAF freq. 122.9 at COVEY TRAILS arpt, 29°41′23″N, 95°50′22″W. Add obst 472′MSL (290′AGL) UC, 30°11′35″N, 95°38′36″W. Add obst 562′MSL (265′AGL) UC, 30°19′30″N, 95°38′55″W. Add obst 430′MSL (225′AGL) UC, 30°13′20″N, 95°33′07″W. Add obst 613′MSL (340′AGL) UC, 30°23′50″N, 95°19′42″W. Add obst 490′MSL (265′AGL) UC, 30°08′09″N, 95°40′51″W.

Military Training Routes

No Changes

IFR GULF OF MEXICO VERTICAL FLIGHT REFERENCE CHART 9th Edition, February 16, 2006

SABINE PASS VOR/DEM (SBI): OTS Indefinitely. GULFPORT VORTAC VOR (GPT): Voice OTS Indefinitely. TACAN AZM OTS Indefinitely. JACKSONVILLE ARTCC, HOUSTON OCEANIC CTA/FIR KZHU and Gulf of Mexico Low Control boundaries are amended.

Add Mustang Beach (RAS) arpt, N 27–48–42.6, W 97–05–19.5. Change as appropriate on Title Panel: FOR CHARTING ERRORS CONTACT: FAA, National Aeronautical Charting Office, ATO–W SSMC–4, Sta. #2335. FOR RECOMMENDATIONS REGARDING FORMAT AND CONTENT CONTACT: FAA, Aeronautical Information Services, ATO–R, Add Telephone 1–866–295–8236. FOR PROCUREMENT CONTACT: Distribution Division, ATO–W, 10201 Good Luck Road, Glenn Dale, MD 20769–9700 Add Online at www.naco.faa.gov Email 9-AMC-Chartsales@faa.gov, Fax 301–436–6829 Or any authorized chart agent. All other Title Panel information remains unchanged.

1) BEEVILLE NDB (BEA) OTS indefinitely 2). Per Chart Review- Delete DE RIDDER RCO at WHITE LAKE VOR/DME (LLA)

Port Lavaca (PKV) NDB OTS Indefinitely N28°-39.05′ W96°-40.89′. Orange (ORG) NDB OTS deleted N30°-04.22′ W93°-47.70. Gulfport (GPT) VORTAC modified to L-VOR/DME, New GP's N30°-24.31′ W89°-04.50′ May (T51) airport name modified to ''Dan Jones Intl''

Southland Fld airport ident changed to (UXL)

KANSAS CITY SECTIONAL 77th Edition, November 23, 2006

No major changes.

Military Training Routes

No changes

MEMPHIS SECTIONAL CHART 77th Edition. September 28, 2006

Add obst 924′MSL (420′AGL) UC, 35°02′14″N, 93°14′05″N. Add obst 711′MSL (278′AGL) UC, 34°34′29″N, 88°41′31″N. Add obst 727′MSL (406′AGL) UC, 34°42′15″N, 89°48′45″N. Add obst 726′MSL (310′AGL)UC, 34°17′35″N, 89°26′51″N. Change obst from 653′MSL (303′AGL) to 720′MSL (370′AGL), 33°00′53″N, 94°20′28″N. Add obst 813′MSL (498′AGL) UC, 33°20′44″N, 88°14′06″N. Add obst 881′MSL (290′AGL) UC, 35°52′13″N, 87°52′10″N. Add obst 826′MSL (340′AGL) UC, 34°48′00″N, 88°33′50″N. Add obst 881′MSL (291′AGL) UC, 34°13′37″N, 89°36′16″N. Add obst 874′MSL (410′AGL) UC, 34°50′03″N, 88°57′03″N. Add obst 630′MSL (311′AGL) UC, 34°33′54″N, 89°28′55″N. Add obst 839′MSL (311′AGL) UC, 32°58′55″N, 88°56′04″N. Add obst 666′MSL (360′AGL) UC, 33°04′41″N, 90°03′40″N. Add obst 590′MSL (400′AGL) UC, 32°05′32″N, 90°22′11″N. Add obst 525′MSL (311′AGL) UC, 32°05′32″N, 90°22′11″N. Add obst 525′MSL (311′AGL) UC, 33°20′49″N, 88°43′44″N. Add obst 525′MSL (270′AGL) UC, 33°22′45″N, 88°51′54″N. Add obst 656′MSL (311′AGL) UC, 32°21′22″N, 88°39′28″N. Add obst 625′MSL (224′AGL) UC, 35°37′58″N, 88°51′54″N. Add obst 780′MSL (311′AGL) UC, 32°21′22″N, 88°39′28″N. Add obst 625′MSL (224′AGL) UC, 35°37′58″N, 88°51′54″N. Delete CAMDEN NDB, 33°36′48″N, 092°46′03″ Delete FORREST CITY NDB, 34°56′27″N, 90°04′25″

Military Training Routes

No changes

MEMPHIS TERMINAL AREA CHART 35th Edition, September 28, 2006

Add obst 727'MSL (406'AGL) UC, 34°42'15"N, 89°48'45"W. Add obst 630'MSL (311'AGL) UC, 34°33'54"N, 89°28'55"W. Add obst 525'MSL (311'AGL) UC, 34°47'05"N, 90°08'50"W. Delete FORREST CITY NDB, 34°56'27"N, 090°46'25"

Military Training Routes

No Changes

NEW ORLEANS SECTIONAL 79th Edition, November 23, 2006

No major changes.

Military Training Routes

No Changes

NEW ORLEANS TERMINAL AREA CHART 64th Edition, November 23, 2006

No major changes.

Military Training Routes

No Changes

PHOENIX SECTIONAL 76th Edition, October 26, 2006

No major changes.

Military Training Routes

No changes

ST. LOUIS SECTIONAL 74th Edition, April 13, 2006

Delete KNOB CREEK airport $38^{\circ}01'14''N$, $85^{\circ}50'45''W$. Change MEF 1^3 to 1^4 in quadrant $39^{\circ}00'-39^{\circ}30'N$, $90^{\circ}30'-91^{\circ}00'$. Change MEF 1^3 to 1^4 in quadrant $36^{\circ}30'-37^{\circ}00'N$, $90^{\circ}30'-91^{\circ}00'$. Add NICHOLASVILLE, KY Class E. That airspace extending upward from 700 feet above the surface within a 6.5-radius of Lucas Field Airport; excluding that airspace within the Lexington, KY, Class E airspace area. Add obst 995'MSL (320'AGL), $39^{\circ}13'08''N$, $86^{\circ}14'17''N$. Add obst 1115'MSL (310'AGL)UC, $40^{\circ}08'10''N$, $86^{\circ}43'23''N$. Add obst 1126'MSL (264'AGL)UC, $39^{\circ}39'31'13''N$, $86^{\circ}29'13''N$. Add obst 1162'MSL (307'AGL)UC, $38^{\circ}56'09''N$, $86^{\circ}42'43''N$. Add obst 1105'MSL (309'AGL)UC, $39^{\circ}30'06''N$, $86^{\circ}47'05''N$. Add obst 1140'MSL (350'AGL)UC, $36^{\circ}57'37''N$, $86^{\circ}32'49''N$. Add obst 1048'MSL (345'AGL)UC, $38^{\circ}25'59''N$, $86^{\circ}45'06''N$. Add obst 1016'MSL (260'AGL), $38^{\circ}09''57'N$, $86^{\circ}08'09''N$. Add obst 1090'MSL (300'AGL)UC, $39^{\circ}16'39''N$, $86^{\circ}14'19''N$. Add obst 1115'MSL (310'AGL)UC, $40^{\circ}08'09''N$, $86^{\circ}43'23''N$. Add obst 197'MSL (347'AGL)UC, $39^{\circ}28'51''N$, $89^{\circ}10'28''N$. Add obst 1327'MSL (335'AGL). $37^{\circ}58'02''N$, $90^{\circ}21'10''N$.

Delete Arnold NDB, 38°12'53"N, 84°49'11"W, Add LAMBERT-ST LOUIS INTL ATCT frequencies 132.475 (WEST), 239.275 (WEST), Add RACER A MOA: Boundary beginning at 39°12'30"N, 86°09'50"W to 39°07'36"N, 86°08'00"W to 39°07'36"N, 85°59′30″W to 39°00′00″N. 85°59′30″W to 38°57′48″N. 86°01′29″W to 38°57′48″N. 86°16′06″W to 39°06′00″N. 86°15'00"W to the point of beginning, ALTITUDE: 500 AGL TO BUT NOT INCLUDING 4000 MSL, TIME OF USE: MAY 1 THROUGH SEPT 30, 0700-2200 LCL TIME DAILY; OCT 1 THROUGH APR 30, 0800-2200 LCL TIME, TUE THROUGH SAT, OTHER TIMES BY NTM. RACER A WILL NOT BE ACTIVATED 2200-0700 LCL TIME. CONTROLLING AGENCY: FAA, INDIANAPOLIS ARTCC. Add RACER B MOA: Boundary beginning at 39°12'30"N, 86°09'50"W to 39°07'36"N, 86°08'00"W to 39°07'36"N, 85°59'30"W to 39°00'00"N, 85°59'30"W to 38°57'48"N, 86°01'29"W to 38°57'48"N, 86°16'06"W to 39°06'00"N, 86°15'00"W to the point of beginning, ALTITUDE: 4000 MSL TO 8000 MSL, TIME OF USE: MAY 1 THROUGH SEPT 30, 0700-2200 LCL TIME DAILY; OCT 1 THROUGH APRIL 30, 0800-2200 LCL TIME, TUE THROUGH SAT, O/T BY NTM: RACER B MOA WILL NOT BE ACTIVATED BETWEEN 2200-0700 LCL TIME. CONTROLLING AGENCY: FAA, INDIANAPOLIS ARTCC. Add RACER C MOA: Boundary beginning at 39°12'30"N, 86°09'50"W to 39°12'30"N, 85°59'30"W to 39°07'36"N, 85°59'30"W to 39°07'36"N, 86°08'00"W to the point of beginning. ALTITUDE: 500 AGL TO BUT NOT INCLUDING FL 180. TIME OF USE: MAY 1 THROUGH SEPT 30, 0700-2200 LCL TIME DAILY; OCT 1 THROUGH APRIL 30, 0800-2200 LOCAL TIME, TUE THROUGH SAT, O/T BY NTM; RACER C MOA WILL NOT BE ACTIVATED BETWEEN 2200-0700 LCL TIME. CONTROLLING AGENCY: FAA, INDIANAPOLIS ARTCC. Add RACER D MOA: Boundary beginning at 39°22'00"N, 86°06'40"W to 39°22'00"N, 85°59'30"W to 39°21'30"N, 85°59'30"W to 39°21'30"N, 86°06'00"W to 39°13'00"N, 86°06'00"W to 39°13′00″N, 85°59′30″W to 39°12′30″N, 85°59′30″W to 39°12′30″N, 86°09′50″W to 39°19′00″N, 86°11′20″W to the point of beginning. ALTITUDE: 14000 MSL TO BUT NOT INCLUDING FL 180. TIME OF USE: MAY 1 THROUGH SEPT 30, 0700-2200 LCL TIME DAILY; OCT 1 THROUGH APRIL 30, 0800-2200 LCL TIME, TUE THROUGH SUN, O/T BY NTM. CONTROLLING AGENCY: FAA, INDIANAPOLIS ARTCC. Add JPG A MOA: Boundary beginning at 38°39'00"N, 85°56'00"W to 38°39'00"N, 86°05'13"W to 38°46'00"N, 86°13'00"W to 38°50'34"N, 86°00'53"W to 38°53'57"N, 85°51'51"W to 39°01′00″N, 85°33′00″W to 39°02′05″N, 85°30′00″W to 39°02′57″N, 85°27′42″W to 38°55′00″N, 85°27′42″W to 38°50′00″N, to 85°27′42″W to 38°48′00″N, 85°33′00″W to 38°42′38″N, 85°46′51″W to 38°40′17″N, 85°52′43″W to the point of beginning. Altitude: 500 AGL up to but not including 6000 MSL; excluding the airspace from the surface to but not including 4000 MSL. Time of use: 0800-2300 local daily; other times by NOTAM. JPG A MOA activated in conjunction with the Jefferson Gunnery Range. Controlling agency: FAA, Indianapolis ARTCC. Add JPG B MOA: Boundary beginning at 38°40'17"N, 85°52'43"W to 38°50'34"N, 86°00'53"W to 38°53'57"N, 85°51'51"W to 39°01'00"N, 85°33'00"W to 38°48'00"N, 85°33'00"W to 38°42'38"N, 85°46'51"W to the point of beginning. Altitude: 6000 MSL to but not including FL 180. Time of use: 0800-2300 local time daily; other times by NOTAM. JPG B MOA activated in conjunction with the Jefferson Gunnery Range. Controlling agency: FAA, Indianapolis ARTCC. Add JPG C MOA: Boundary beginning at 38°48'00"N, 85°33'00"W to 39°01'00"N, 85°33'00"W to 39°02'05"N, 85°30'00"W to 38°57'30"N, 85°30'00"W to 38°55'00"N, 85°27'42"W to 38°50'00"N, 85°27'42"W to the point of beginning. Altitude: 6000 MSL up to but not including FL 180. Time of use: 0800-2300 local time daily; other times by NOTAM. JPG C MOA activated in conjunction with the Jefferson Gunnery Range. Controlling agency: FAA, Indianapolis ARTCC. Add JPG D MOA: Boundary beginning at 39°01'00"N, 85°33'00"W to 39°10'00"N, 85°33'00"W to 39°12'00"N, 85°29'00"W to 39°10'00"N, 85°22'00"W to 39°02′00″N, 85°22′00″W to 39°02′57″N, 85°27′42″W to 39°02′05″N, 85°30′00″W to the point of beginning. Altitude: 500 AGL up to but not including 4000 MSL. Time of use: 0800-2300 local time daily; other times by NOTAM. JPG D MOA activated in conjunction with the Jefferson Gunnery Range. Controlling agency: FAA, Indianapolis ARTCC. Add obst 1011'MSL (349'AGL)UC. 39°15'43"N. 89°06'36"W. Add obst 987'MSL (349'AGL)UC. 39°19'04"N. 88°37'14"W. Add obst 1002'MSL (349'AGL)UC, 39°47'51"N, 87°59'40"W. Add obst 765'MSL (280'AGL)UC, 38°24'39"N, 89°54'01"W. Add obst 921'MSL (309'AGL)UC, 37°04'50"N, 87°27'47"W. Add obst 1600'MSL (275'AGL)UC, 37°13'29"N, 84°13'12"W. Add obst 848'MSL (265'AGL)UC, 39°21'23"N, 87°06'40"W,

CONTINUED ON NEXT PAGE

AERONAUTICAL CHART BULLETIN

CONTINUED FROM PRECEDING PAGE

Add obst 1084'MSL (295'AGL)UC, 39°04'20"N, 86°08'24"W. Add obst 868'MSL (300'AGL)UC, 38°52'28"N, 86°03'37"W. Add obst 956'MSL (305'AGL)UC, 39°46'46"N, 88°28'25"W. Add obst 935'MSL (265'AGL)UC, 39°46'46"N, 88°28'25"W. Add obst 1082'MSL (250'AGL)UC, 39°41'02"N, 84°22'58"W. Add obst 691'MSL (290'AGL)UC, 39°41'02"N, 84°22'58"W. Add obst 694'MSL (200'AGL)UC, 39°41'02"N, 84°22'58"W. Add obst 694'MSL (200'AGL), 38°59'14"N, 89°05'57"W. Change obst from 970'MSL (220'AGL) UC to 1064'MSL (315'AGL) UC, 38°23'46"N, 85°26'31"W. Delete WILKINS arpt, 40°11'24"N, 86°55'20"W. Delete NERGENAH arpt, 39°39'18"N, 89°54'55"W. SAN MAR GALE arpt abandoned, 39°27'30"N, 84°07'54"W.

Change CTAF freq 122.8 to 123.075 at SPARTA-HUNTER arpt, 38°08'56"N, 89°41'55"W. Add INDIANAPOLIS INTL ATCT freq 127.82, 39°43'00"N, 86°17'40"W. Add obst 1002'MSL (349'AGL), 39°47'50"N, 87°59'39"W. Add obst 897'MSL (265'AGL), 39°52'58"N, 90°00'44"W. Add obst 840'MSL (305'AGL) UC, 38°26'16"N, 90°59'47"W. Add obst 1063'MSL (263'AGL) UC, 33°37'22"N, 90°53'51"W. Add obst 1673'MSL (453'AGL) UC, 37°13'24"N, 84°02'01"W. Add obst 847'MSL (250'AGL), 39°35'11"N, 89°27'03"W. Add obst 1076'MSL (306'AGL) UC, 37°46'44"N, 85°22'59"W. Add obst 772'MSL (260'AGL) UC, 38°59'24"N, 90°44'24"W. Add obst 1188'MSL (237'AGL) UC, 39°27'06"N, 85°12'00"W. Add obst 1335'MSL (306'AGL) UC, 37°47'44"N, 85°30'53"W. Add obst 1226'MSL (306'AGL) UC, 36°59'37"N, 85°41'15"W. Add obst 1090'MSL (500'AGL) UC, 37°47'44"N, 86°50'57"W.

Military Training Routes

No changes

SAN ANTONIO SECTIONAL 78th Edition. November 23, 2006

No major changes.

Military Training Routes

No Changes

WICHITA SECTIONAL 77th Edition. August 3, 2006

Change CTAF 122.8 to 122.9 at MEDFORD arpt 36°47′26″N, 97°44′56″W. Add obst 3271′MSL (332′AGL), 36°06′03″N, 100°42′32″N. Add obst 1892′MSL (295′AGL)UC, 37°31′15″N, 98°04′55″W. Add obst 1660′MSL (235′AGL)UC, 37°02′48″N, 98°38′35″W. Add obst 1636′MSL (275′AGL)UC, 37°28′04″N, 97°39′43″W. Add obst 1488′MSL (275′AGL)UC, 37°28′04″N, 98°33′18″W. Add obst 1691′MSL (275′AGL)UC, 37°02′59″N, 98°03′18″W. Add obst 1690′MSL (295′AGL)UC, 37°02′59″N, 98°03′18″W. Add obst 1828′MSL (349′AGL)UC, 37°24′26″N, 97°51′03″W. Add obst 2213′MSL (295′AGL)UC, 37°30′34″N, 98°41′13″W. Add obst 1828′MSL (349′AGL)UC, 37°15′54″N, 98°23′55″W. Change obst from 1703′MSL (302′AGL) to 1992′MSL (302′AGL), 37°22′28″N, 98°13′07″W. Add obst 3832′MSL (346′AGL)UC, 36°26′43″N, 101°52′34″W. Revise Wellington, KS Class E: That airspace extending upward from 700 feet above the surface within a 6.8-mile radius of Wellington Municipal Airport and within 2.5 miles each side of the 150° radial of the Wichita VORTAC extending from the 6.8-mile radius to 7.0 miles north of the airport and within 2.5 miles each side of the 150° radial of the Wichita VORTAC extending from Wellington NDB extending from the 6.8-mile radius to 10.5 miles northwest of the airport and within 2.5 miles each side of the 150° radial of the Wichita VORTAC extending from NDB extending from the 6.8-mile radius to 7.0 miles north of the airport. UNICOM freq. at GARDEN CITY arpt, 37°55′36′N, 100°43′24′W is 122.95.

Add obst 1368'MSL (355'AGL), 36°06'27"N, 097°39'24"W. Add obst 1506'MSL (275'AGL)UC, 37°09'16"N, 097°39'58"W. Add obst 2079'MSL (394'AGL)UC, 39°25'50"N, 097°35'25"W. Add obst 3040'MSL (350'AGL)UC, 40°02'47"N, 100°34'30"W. Add obst 1757'MSL (335'AGL)UC, 37°18'28"N, 098°01'09"W. Add obst 1896'MSL (295'AGL)UC, 37°24'27"N, 098°04'27"W. Add obst 1557'MSL (295'AGL)UC, 37°30'4"N, 096°59'03"W. Add obst 1507'MSL (295'AGL)UC, 37°04'14"N, 097°11'46"W. Add obst 1595'MSL (295'AGL)UC, 37°09'15"N, 097°51'29"W. Add obst 2584'MSL (389'AGL)UC, 36°38'20"N, 099°33'38"W. Add obst 2321'MSL (320'AGL)UC, 40°08'37"N, 098°57'03"W. Change obst from 1975'MSL (255'AGL) to 2038'MSL (320'AGL), 37°39'37"N, 098°19'07"W. Add obst 3870'MSL (346'AGL) UC, 36°28'01"N, 101°48'21"W. Add obst 3564'MSL (403'AGL)UC, 36°22'22"N, 101°23'13"W. Delete ALVA NDB, 36°46'45"N, 098°40'16"W. Delete SKY PARK arpt, 36°52'00'N, 097°01'16"W.

Military Training Routes

No Changes

424 LAHSO

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

The hold–short point, marked by an asterisk (*), represents the predetermined points on the runway other than a runway or taxiway.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

| CITY/AIRPORT LOW SIANA LOW SIANCE LO | | • | | | o . |
|--|------------------------------|---------|-----------|-------------|-------------------|
| BATON ROUGE BATON ROUGE METROPOLITAN, RYAN FLD (BTR) 13 | CITY/AIRPORT | LDG RWY | HOLD-S | SHORT POINT | MEASURED DISTANCE |
| BATON ROUGE METROPOLITAN, 13 | | | LOUISIANA | | |
| RYAN FLD (BTR) 13 04L/22R 4,140 feet 22R 13/31 3,450 feet 22L 13/31 2,900 feet NEW ORLEANS LAKEFRONT (NEW) 18R 09/27 5,359 feet DALLAS-FT WORTH TEXAS DALLAS/FORT WORTH INTL (DFW) 17C Twy B* 10,460 feet 18R Twy B* 10,100 feet 35C Twy EJ* 9,050 feet HOUSTON GEORGE BUSH INTERCONTINENTAL/HOUSTON 26L Twy NE 9,010 feet (IAH) 26L Twy NP 9,010 feet LONGVIEW EAST TEXAS RGNL (GGG) 31 17/35* 8,100 feet WACO WACO RGNL (ACT) 14 01/19 5,150 feet | BATON ROUGE | | | | |
| Mathematical Registration | BATON ROUGE METROPOLITAN, | | | | |
| NEW ORLEANS | RYAN FLD (BTR) | 13 | 0 | 4L/22R | 4,140 feet |
| NEW ORLEANS | | 22R | 1 | 3/31 | 3,450 feet |
| LAKEFRONT (NEW) 18R 09/27 5,359 feet LAKEFRONT (NEW) 18R 09/27 5,359 feet LAKEFRONT WORTH TEXAS DALLAS-FT WORTH WORTH INTL (DFW) 17C Twy B* 10,460 feet 18R Twy B* 10,100 feet 35C Twy EJ* 9,050 feet HOUSTON Twy Z* 10,650 feet GEORGE BUSH INTERCONTINENTAL/HOUSTON Twy NE 9,010 feet (IAH) 26L Twy NE 9,010 feet 08R Twy NP 9,019 feet LONGVIEW EAST TEXAS RGNL (GGG) 31 17/35* 8,100 feet WACO WACO RGNL (ACT) 14 01/19 5,150 feet | | 22L | 1 | 3/31 | 2,900 feet |
| TEXAS TEXAS TEXAS TEXAS TEXAS | NEW ORLEANS | | | | |
| TEXAS | LAKEFRONT (NEW) | 18R | 0 | 9/27 | 5,359 feet |
| DALLAS-FT WORTH DALLAS/FORT WORTH INTL (DFW) | | 27 | 1 | 8R/36L | 2,560 feet |
| DALLAS/FORT WORTH INTL (DFW) | | | TEXAS | | |
| 18R | DALLAS-FT WORTH | | | | |
| 18R | DALLAS/FORT WORTH INTL (DFW) | 17C | Tv | wy B* | 10,460 feet |
| MOUSTON GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH) 26L Twy NE 9,010 feet | , , , | 18R | | | 10,100 feet |
| MOUSTON GEORGE BUSH INTERCONTINENTAL/HOUSTON | | 35C | T | wv EJ* | 9.050 feet |
| GEORGE BUSH INTERCONTINENTAL/HOUSTON (IAH) 26L 08R Twy NE 9,010 feet 9,019 feet 7 wy NP 9,019 feet 17 wy NP | | 36L | T | wy Z* | 10,650 feet |
| INTERCONTINENTAL/HOUSTON (IAH) | HOUSTON | | | • | |
| (IAH) 26L 08R Twy NE Twy NP 9,010 feet 9,019 feet LONGVIEW EAST TEXAS RGNL (GGG) 31 35 13/31* 17/35* 4,150 feet WACO WACO RGNL (ACT) 14 01/19 5,150 feet | GEORGE BUSH | | | | |
| (IAH) 26L 08R Twy NE Twy NP 9,010 feet 9,019 feet LONGVIEW EAST TEXAS RGNL (GGG) 31 35 13/31* 17/35* 4,150 feet WACO WACO RGNL (ACT) 14 01/19 5,150 feet | INTERCONTINENTAL/HOUSTON | | | | |
| LONGVIEW EAST TEXAS RGNL (GGG) 31 17/35* 8,100 feet 35 13/31* 4,150 feet WACO WACO RGNL (ACT) 14 01/19 5,150 feet | | 26L | T | wy NE | 9,010 feet |
| EAST TEXAS RGNL (GGG) 31 17/35* 8,100 feet 35 13/31* 4,150 feet 4,150 feet 4,150 feet 4,150 feet 4,150 feet 4,150 feet 5,150 feet 4,150 feet 4,150 feet 4,150 feet 4,150 feet 4,150 feet 6,150 feet 6, | | 08R | T | wy NP | 9,019 feet |
| WACO RGNL (ACT) 14 01/19 5,150 feet 5,150 feet | LONGVIEW | | | | |
| WACO WACO RGNL (ACT) 14 01/19 5,150 feet | EAST TEXAS RGNL (GGG) | 31 | 1 | 7/35* | 8,100 feet |
| WACO RGNL (ACT) 14 01/19 5,150 feet | | 35 | 1 | 3/31* | 4,150 feet |
| | WACO | | | | |
| 19 14/32 6,050 feet | WACO RGNL (ACT) | 14 | 0 | 1/19 | 5,150 feet |
| | | 19 | 1 | 4/32 | 6,050 feet |

In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

GENERAL INFORMATION

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

- 1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., 🖏 💽 😧
- 2. Approach lighting systems that do not bear a system identification are indicated with a negative "n" beside the name. A star (*) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., 0 To activate lights use frequency indicated in the communication section of the chart with a $m{0}$ or the appropriate

lighting system identification e.g., UNICOM 122.8 0, 🚵, 💿

KEY MIKE

FUNCTION

7 times within 5 seconds

Highest intensity available 5 times within 5 seconds

3 times within 5 seconds

Medium or lower intensity (Lower REIL or REIL-off) Lowest intensity available (Lower REIL or REIL-off)

CHART CURRENCY INFORMATION

Amdt 11A 99365 Date of latest change FAA procedure amendment number—

The Chart Date indentifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

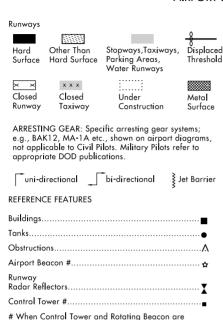
MISCELLANEOUS

- Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- Indicates control tower temporarily closed UFN.

06271 **IFGFND**

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM



Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways. Where a displaced threshold is shown and/or part of the runway is otherwise not available for landing an annotation is added to indicate the landing length of the runway; e.g., Rwy 13 ldg 5000'.

co-located, Beacon symbol will be used and

further identified as TWR.

Helicopter Alighting Areas (H) [+] [H] (A) [+] Negative Symbols used to identify Copter Procedures

Runway TDZ elevation.....TDZE 123

landing point.....

(shown when runway slope is greater than or equal to 0.3%)

--- 0.3% DOWN

NOTE:

Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

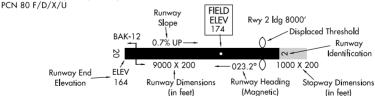
Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

Positional accuracy within ±600 feet unless otherwise noted on the chart.

All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in FLIP. (Foreign Only)

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes e.g.,

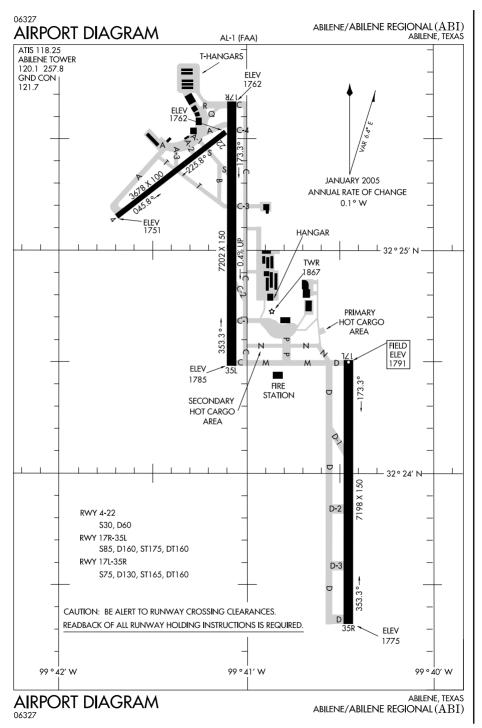
RWY 14-32 \$75, T185, ST175, TT325

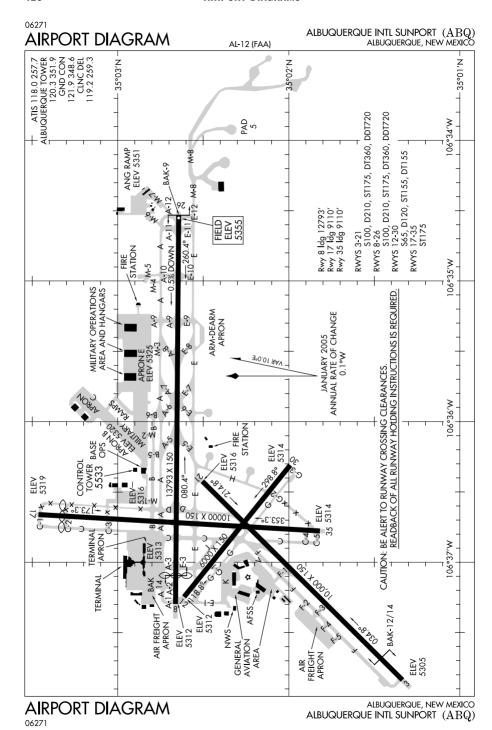


SCOPE

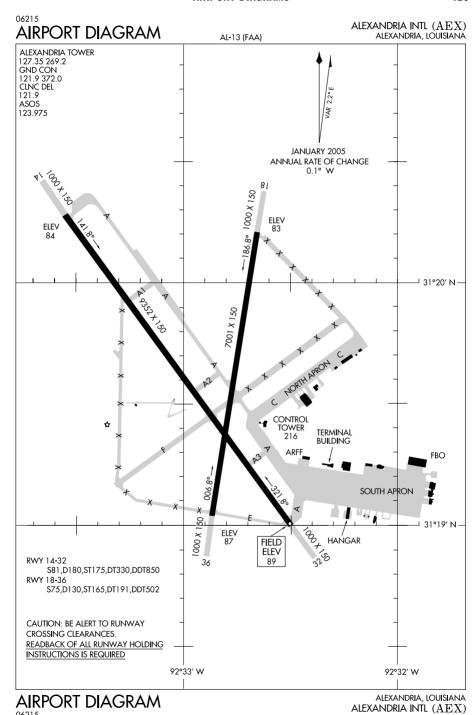
Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

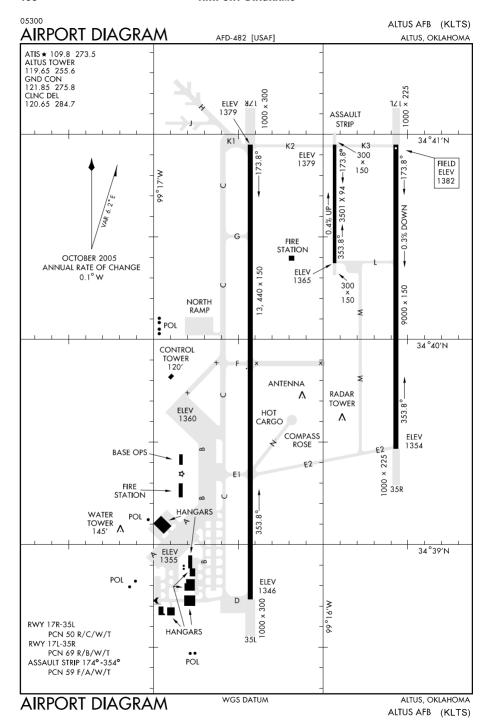
LEGEND

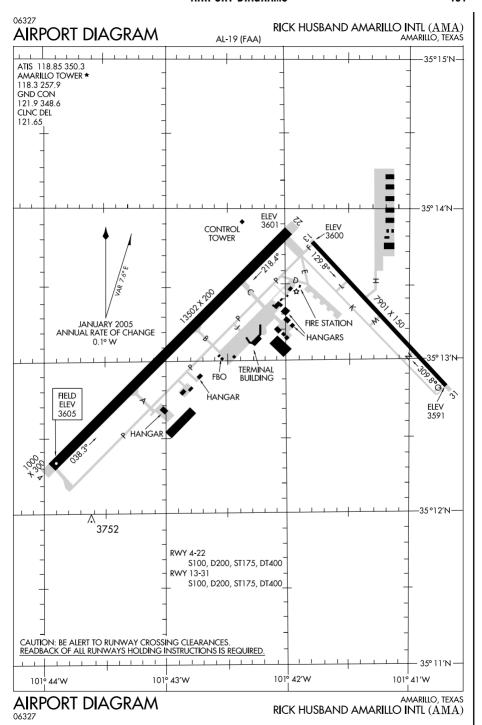


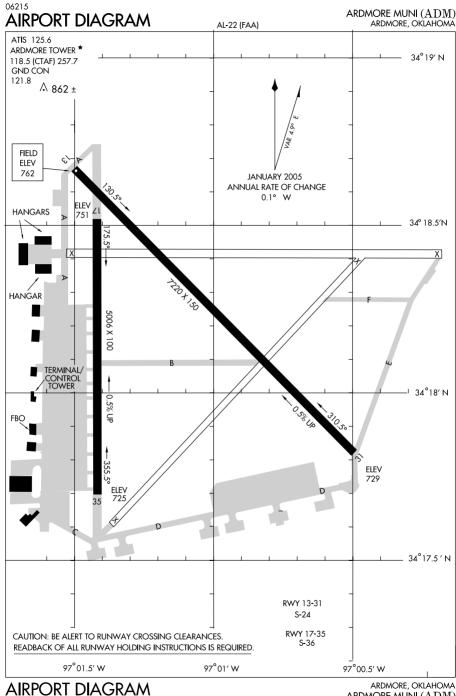


SC. 23 NOV 2006 to 18 JAN 2007

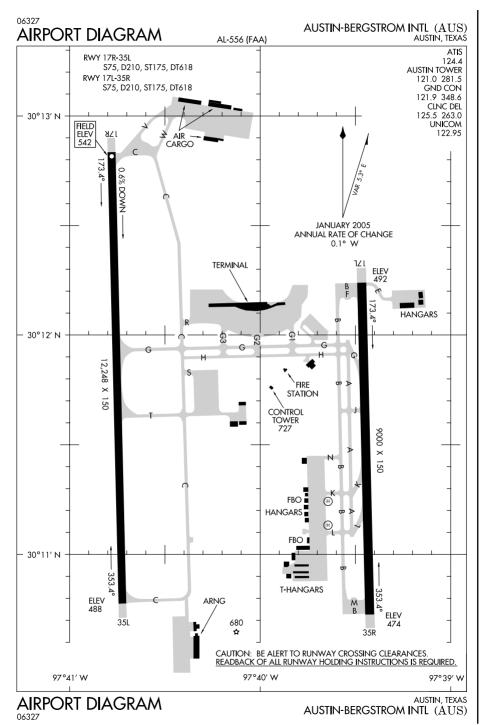


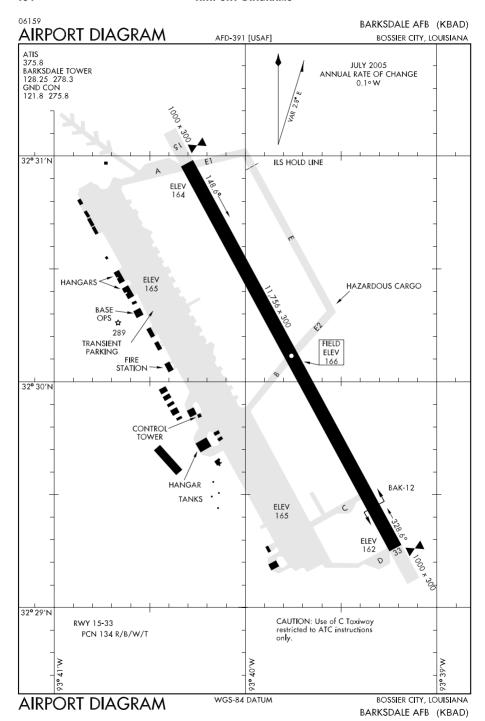


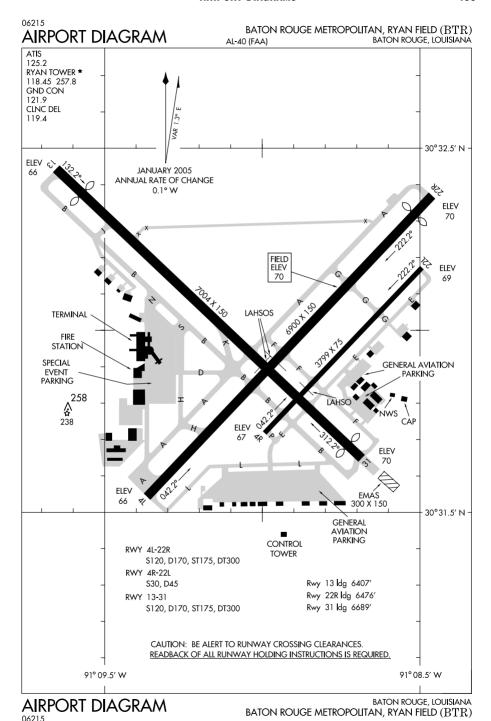




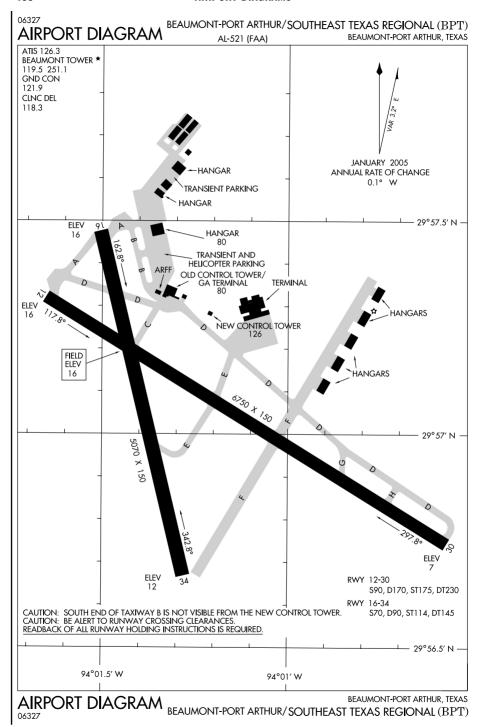
ARDMORE, OKLAHOMA ARDMORE MUNI (ADM)

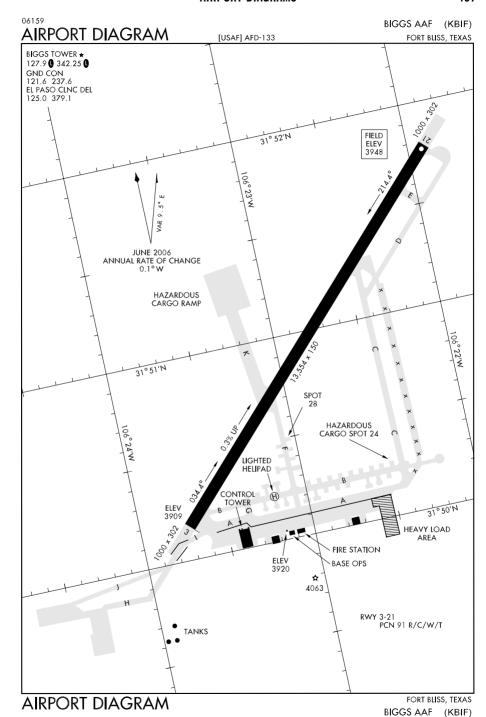




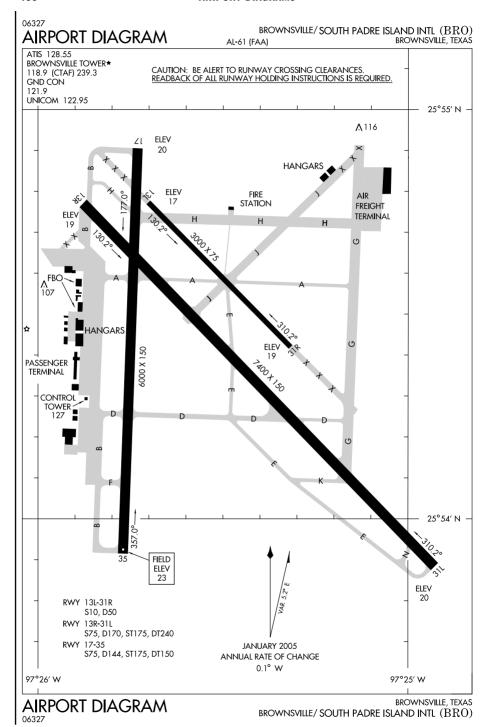


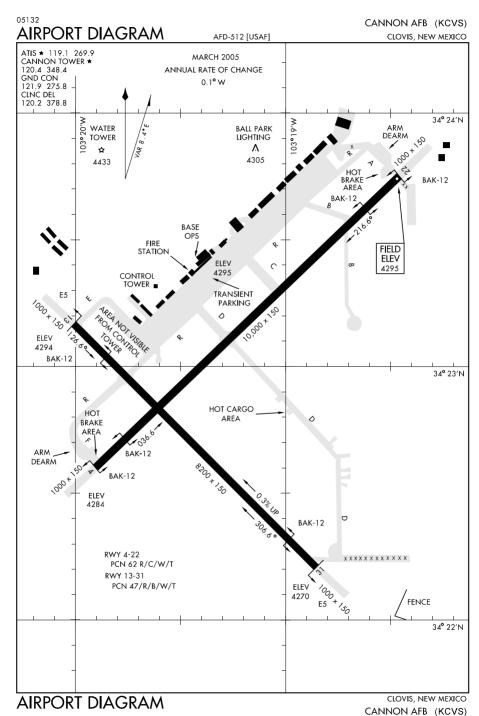
SC. 23 NOV 2006 to 18 JAN 2007

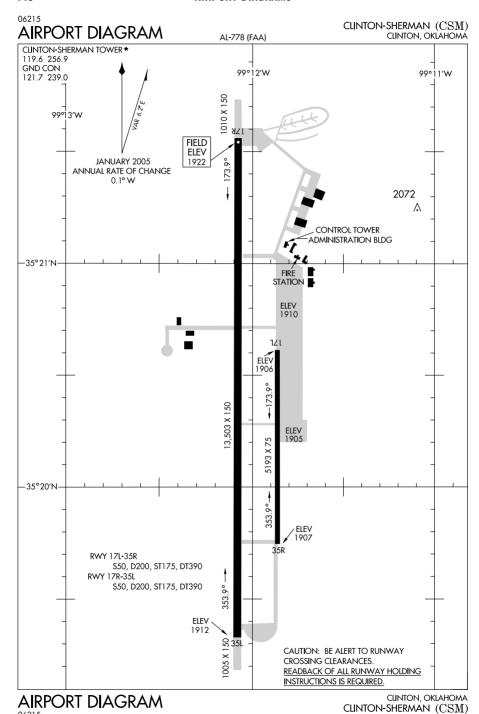




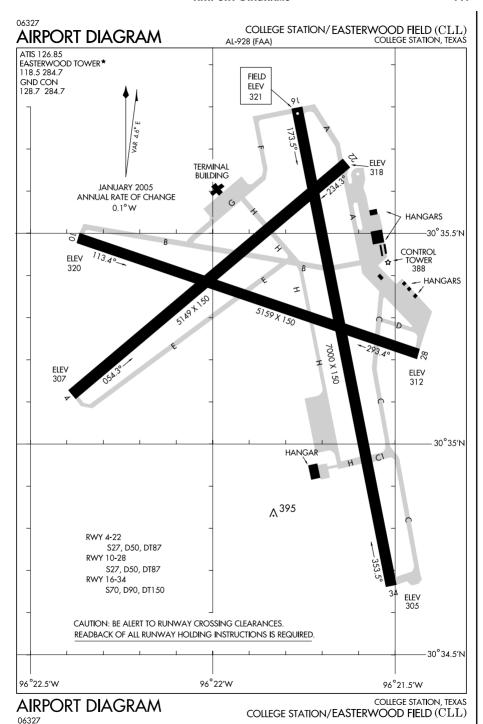
SC, 23 NOV 2006 to 18 JAN 2007

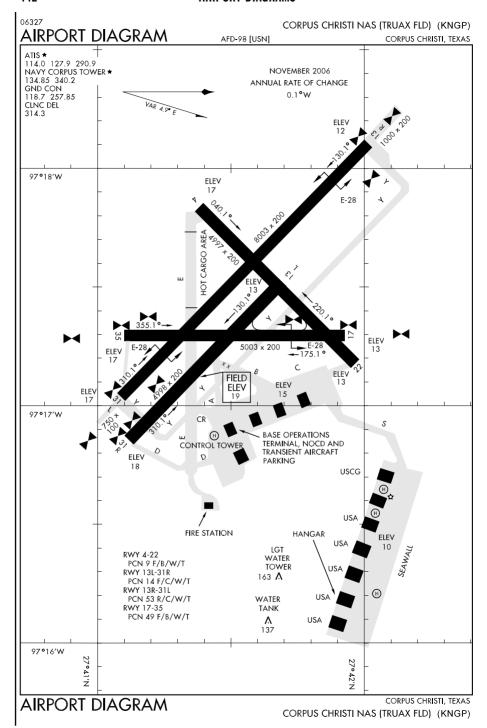


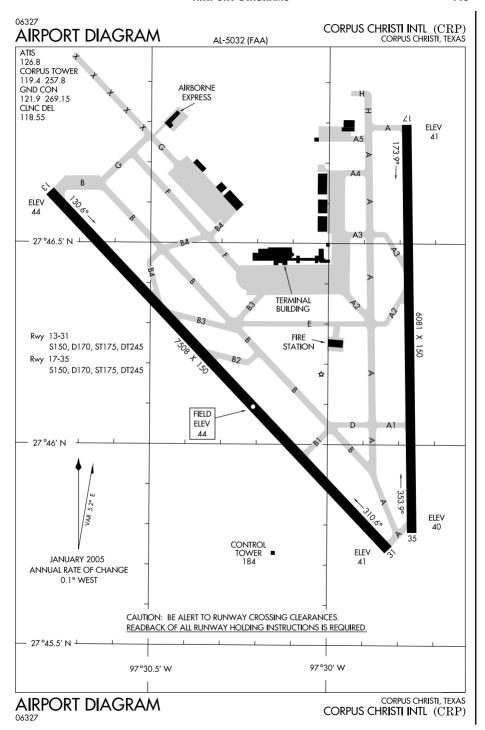


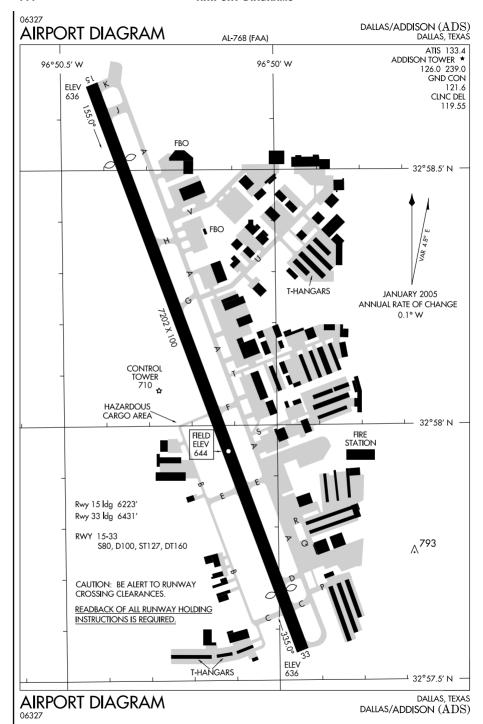


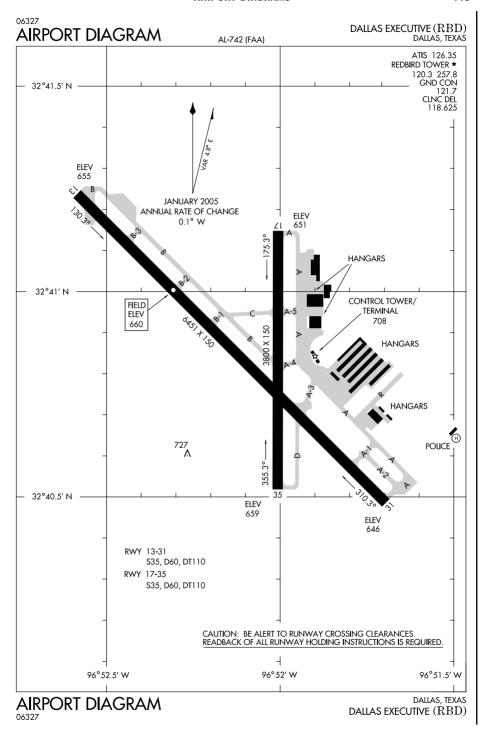
SC. 23 NOV 2006 to 18 JAN 2007

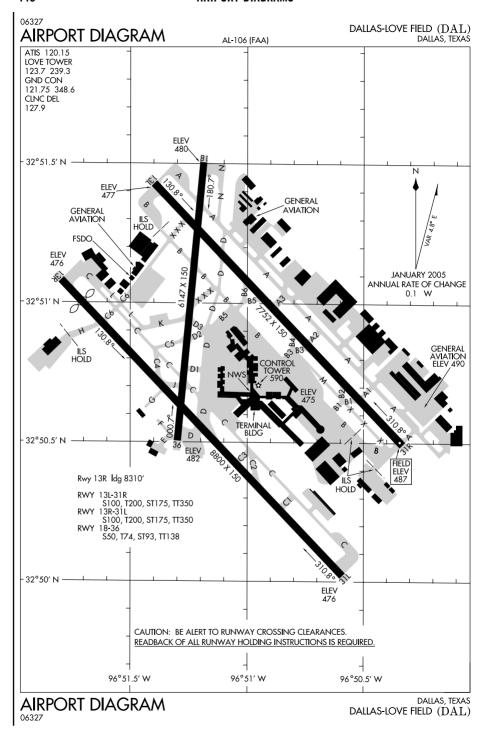




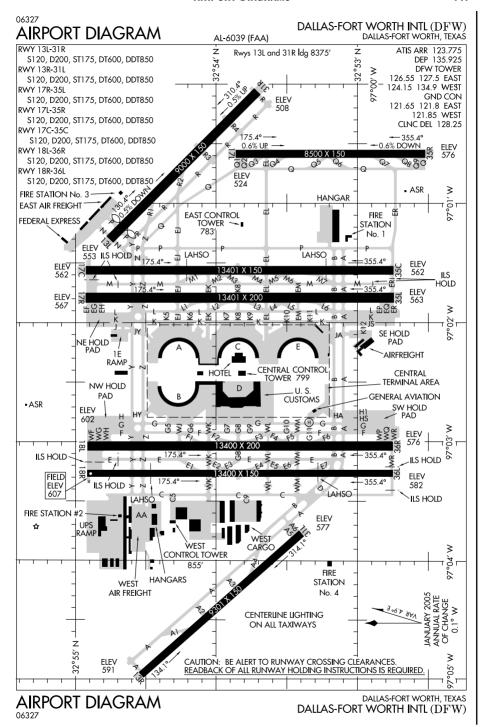


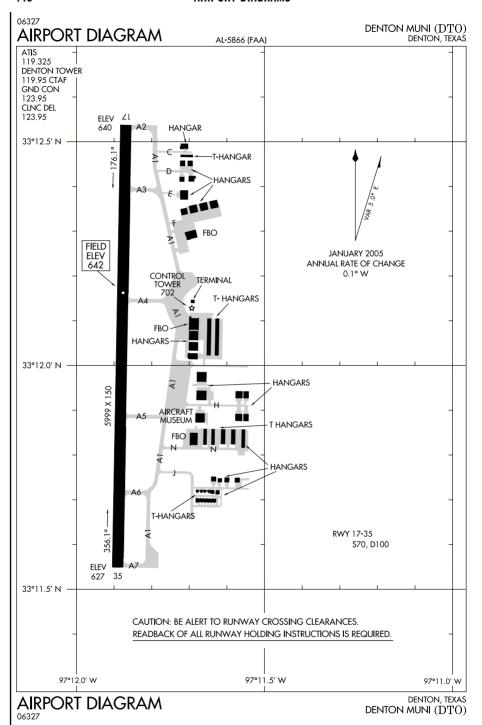


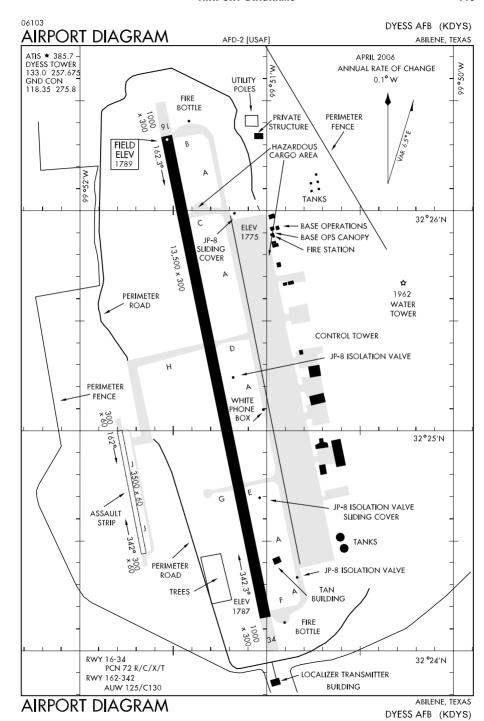


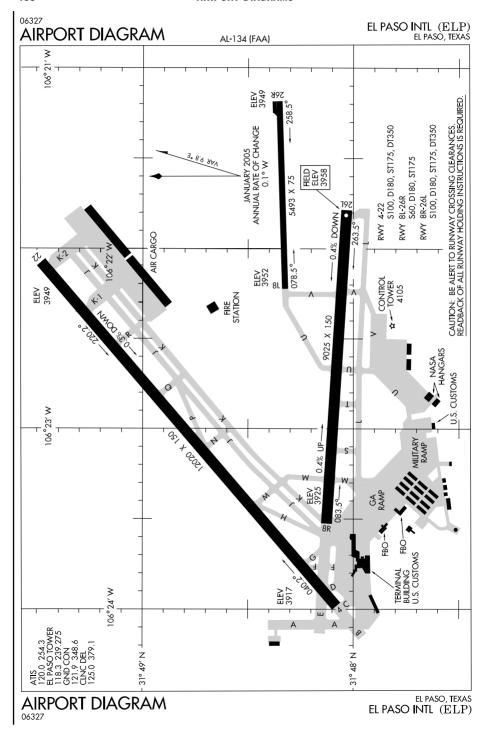


SC. 23 NOV 2006 to 18 JAN 2007

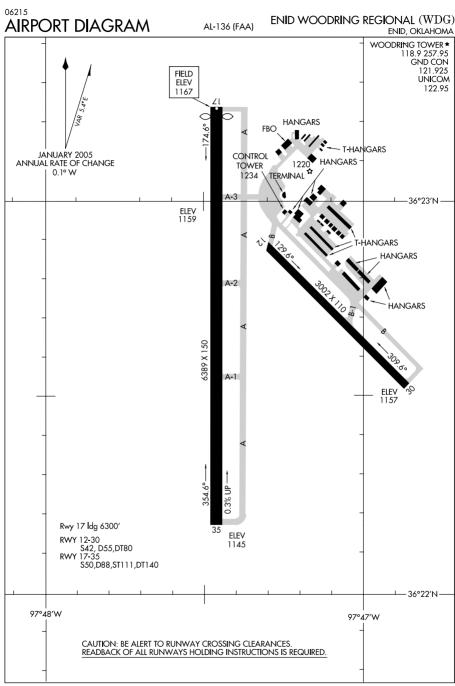






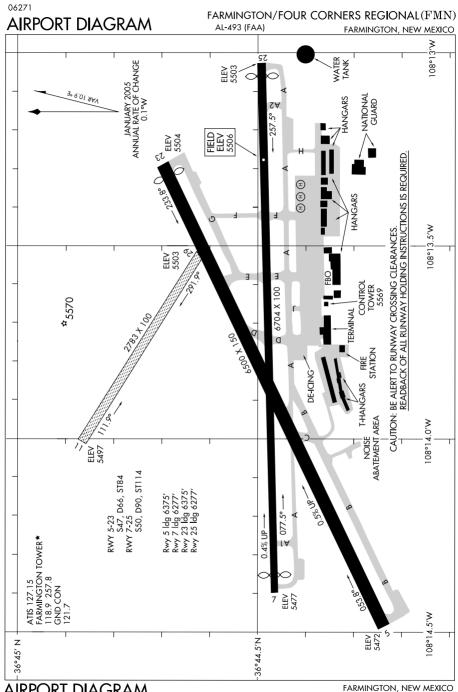


SC, 23 NOV 2006 to 18 JAN 2007



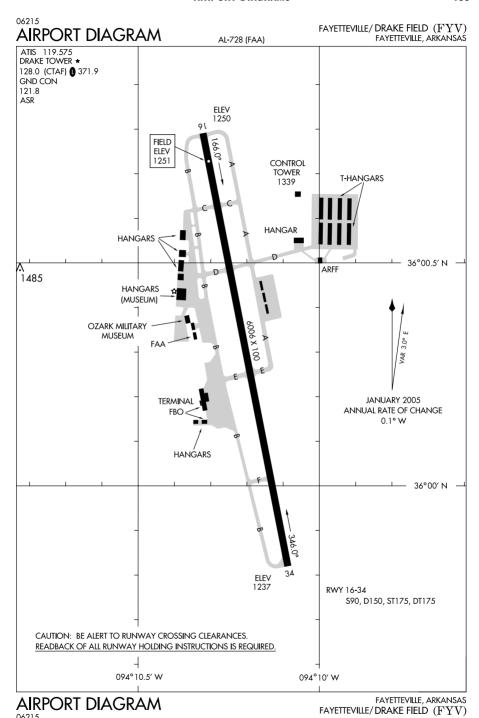
AIRPORT DIAGRAM

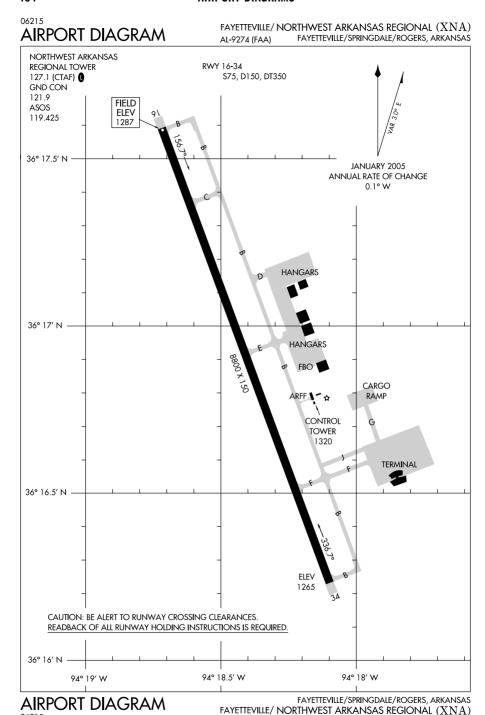
 $\begin{array}{c} \text{ENID, OKLAHOMA} \\ \text{ENID WOODRING REGIONAL (WDG)} \end{array}$



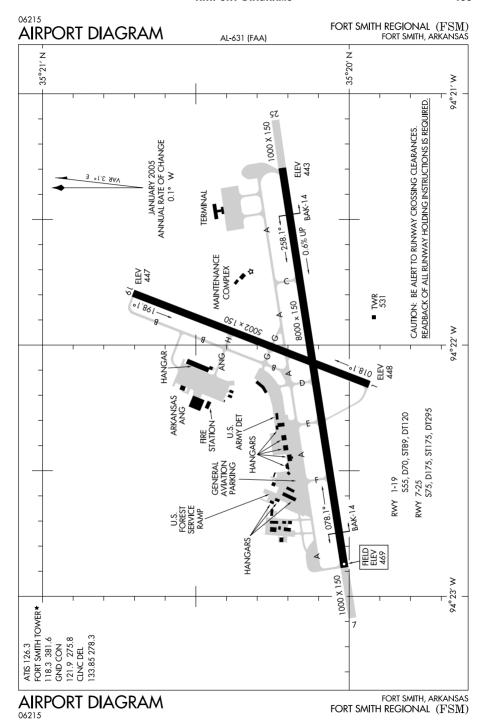
AIRPORT DIAGRAM

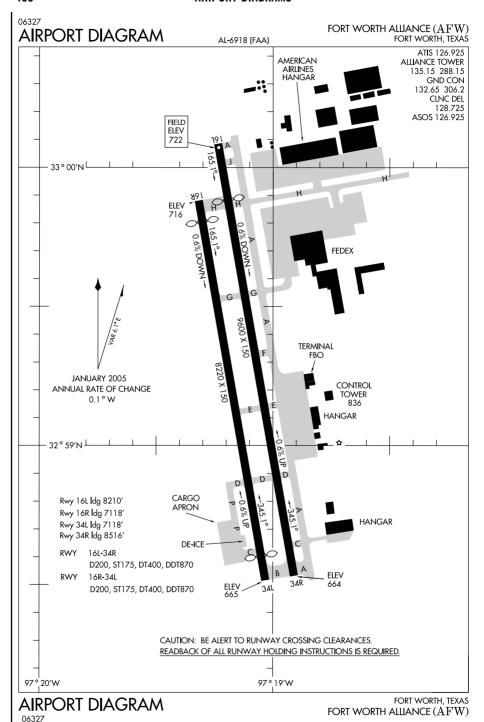
FARMINGTON/FOUR CORNERS REGIONAL(FMN)

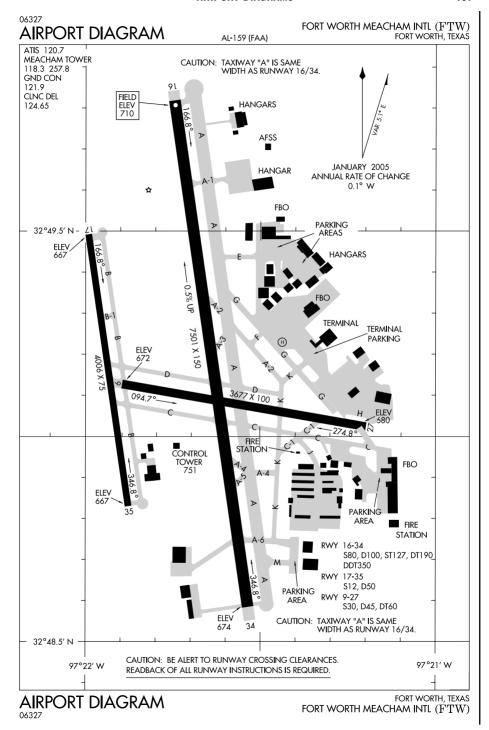


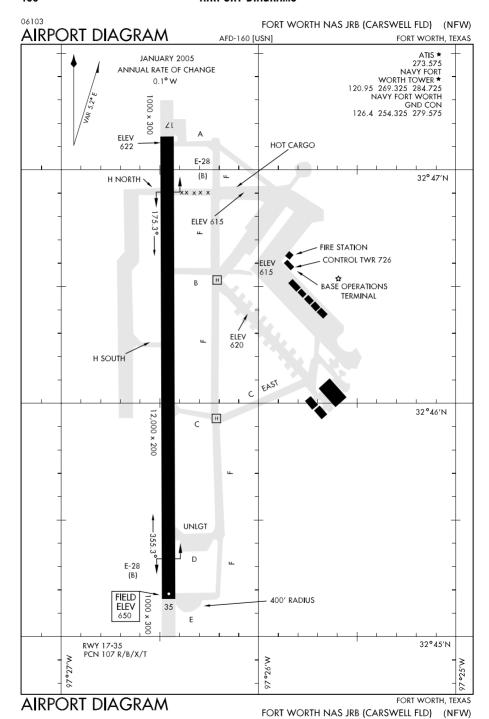


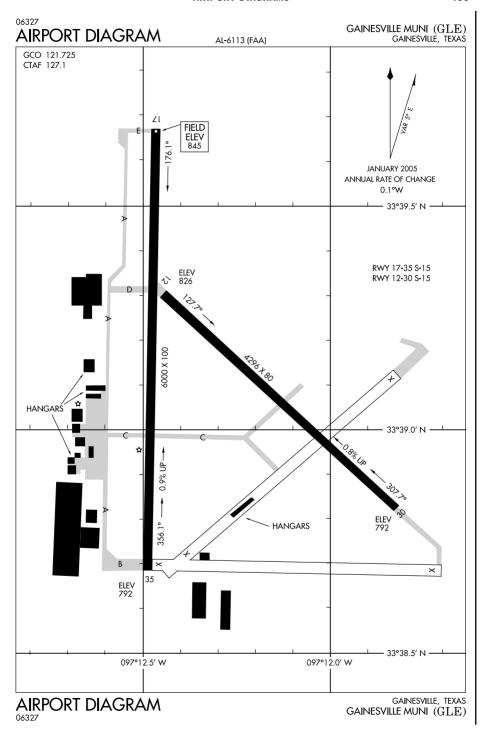
SC. 23 NOV 2006 to 18 JAN 2007



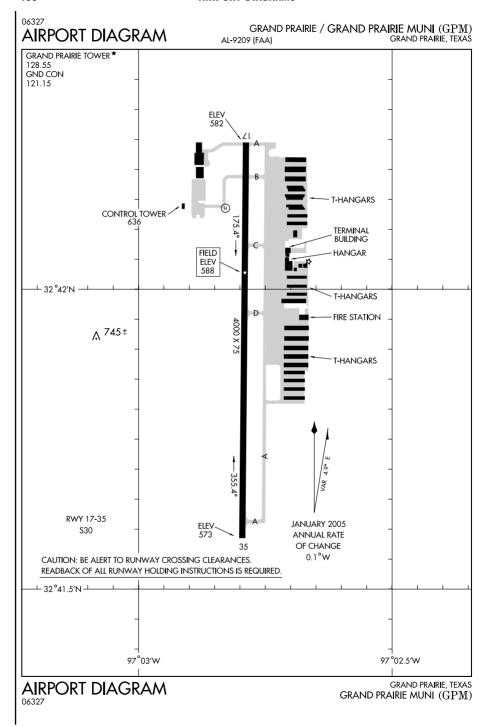


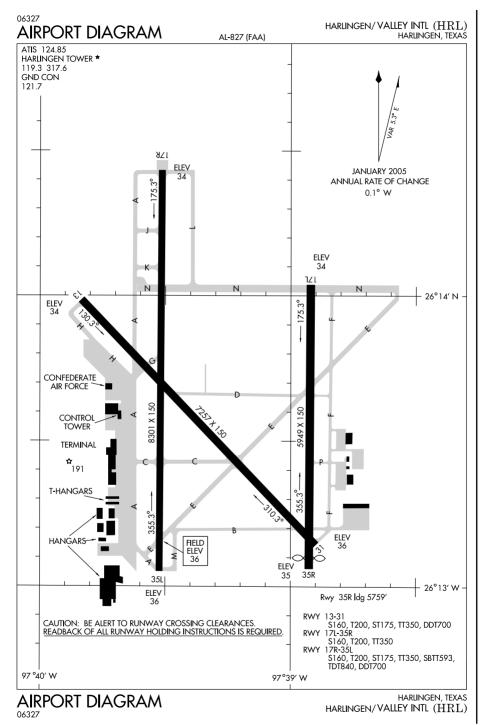


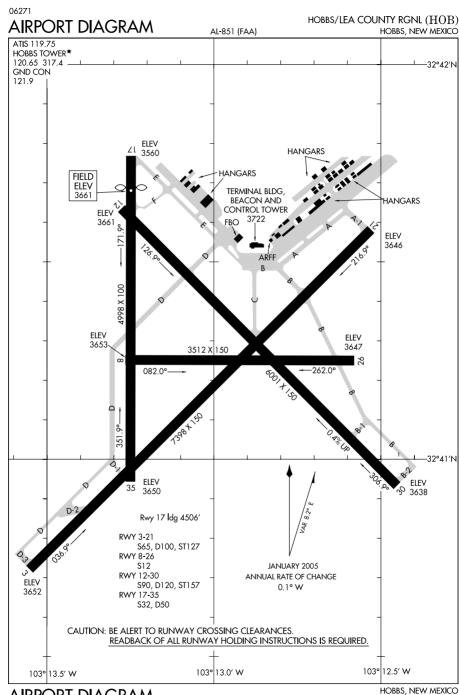




SC, 23 NOV 2006 to 18 JAN 2007

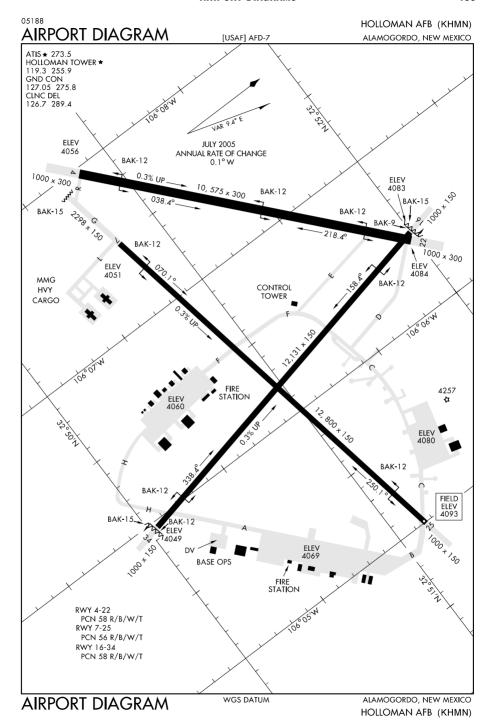


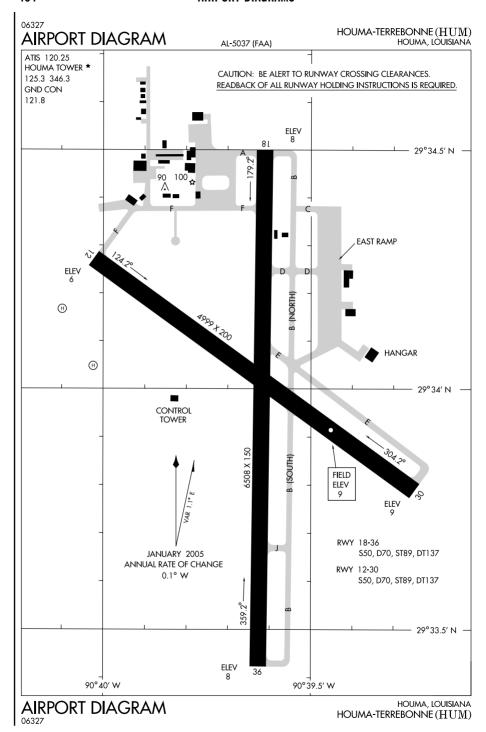




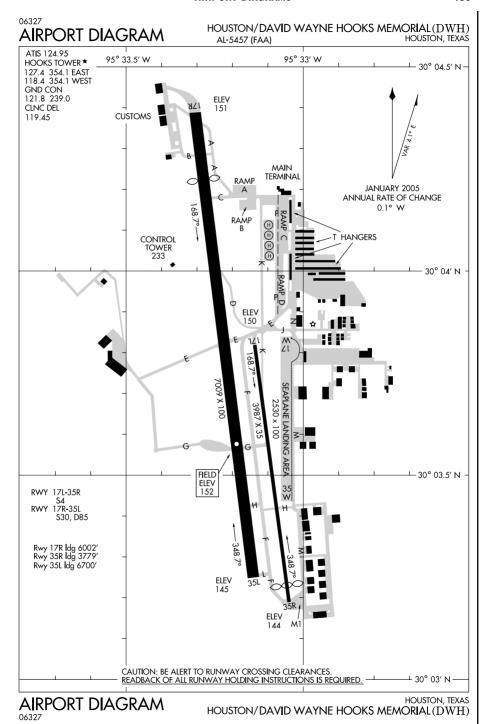
AIRPORT DIAGRAM

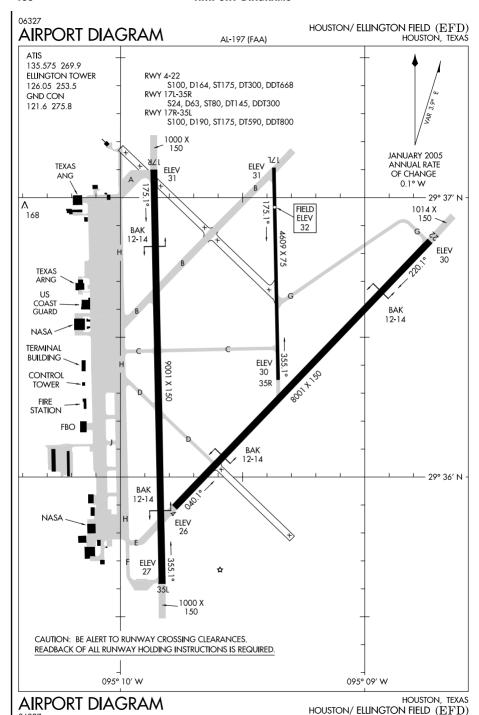
HOBBS/LEA COUNTY RGNL (HOB)

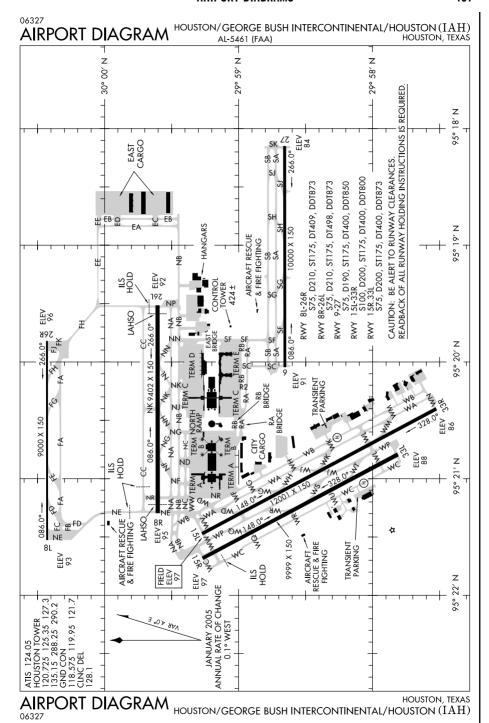


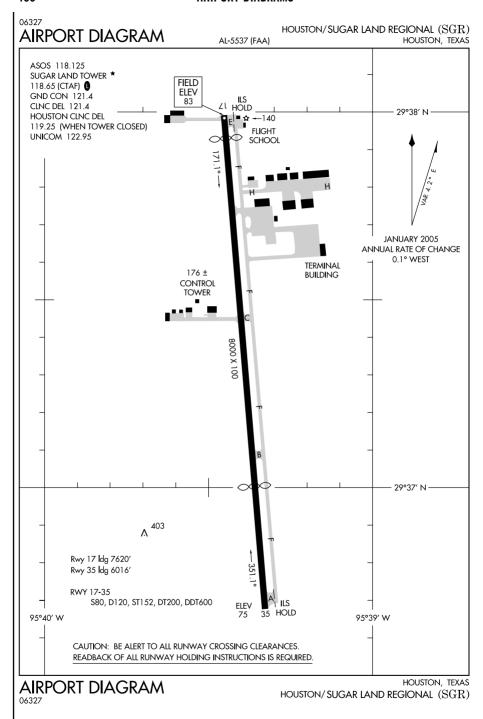


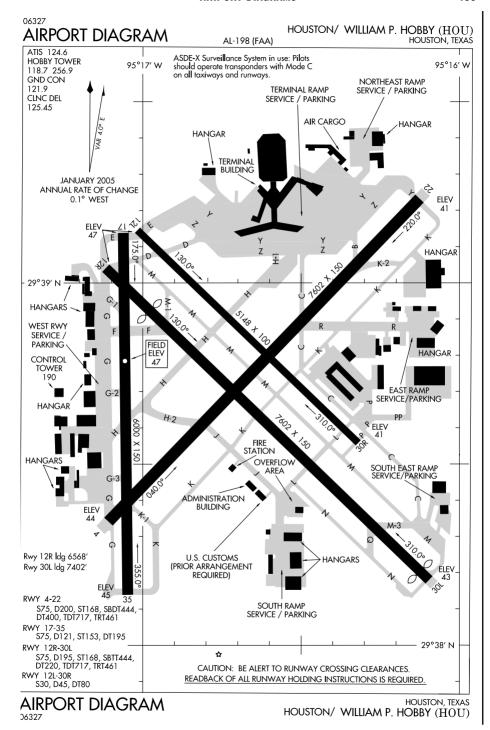
SC. 23 NOV 2006 to 18 JAN 2007

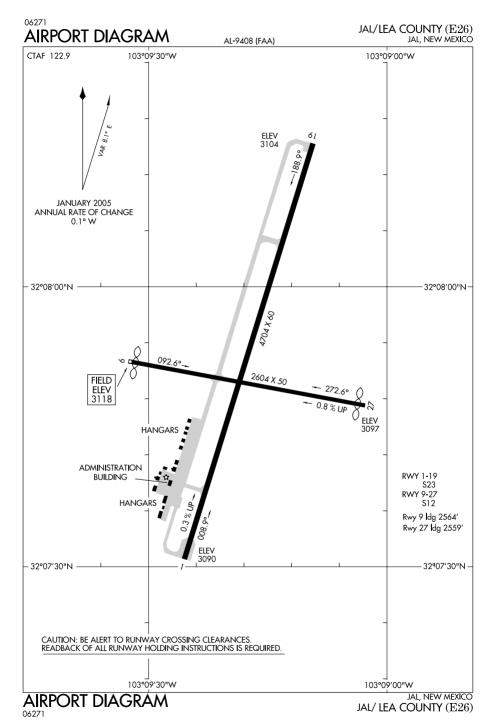


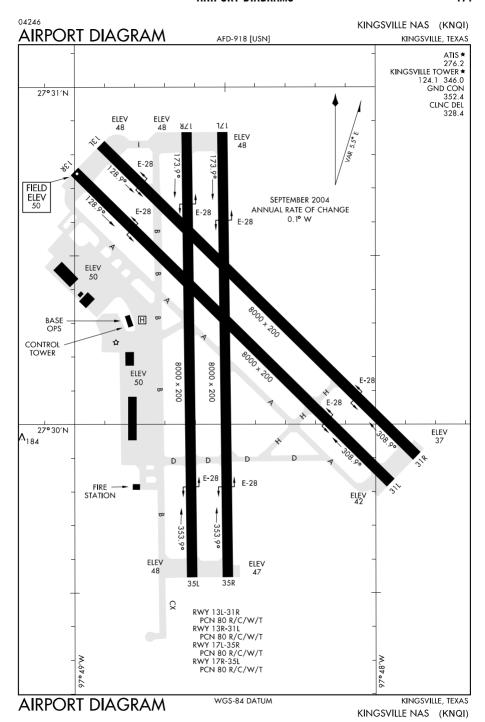


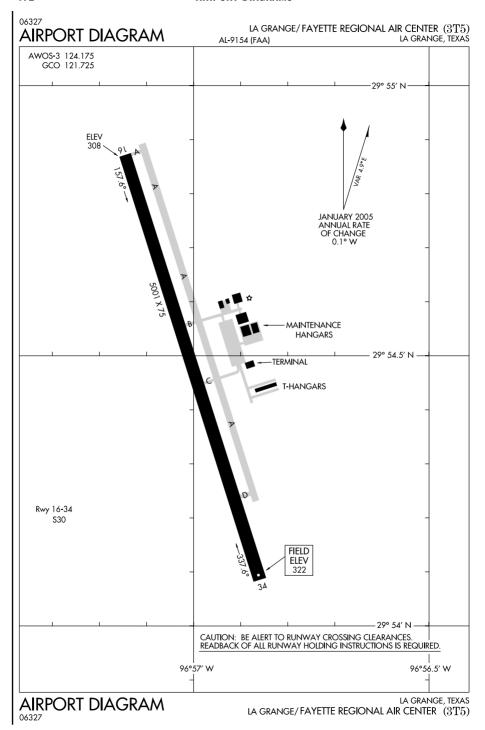




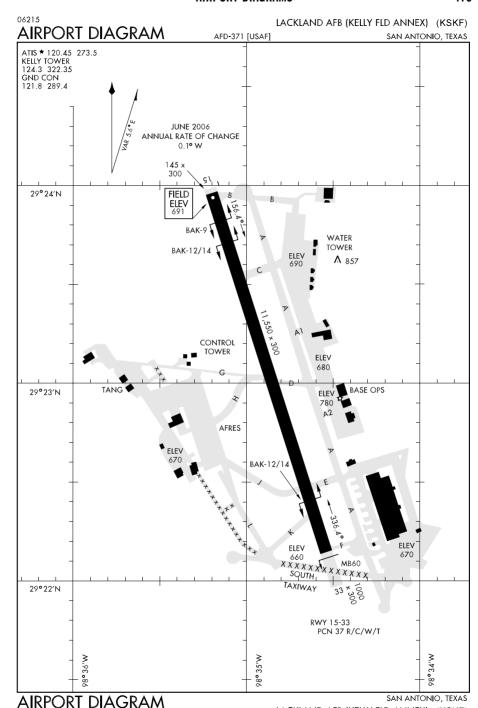




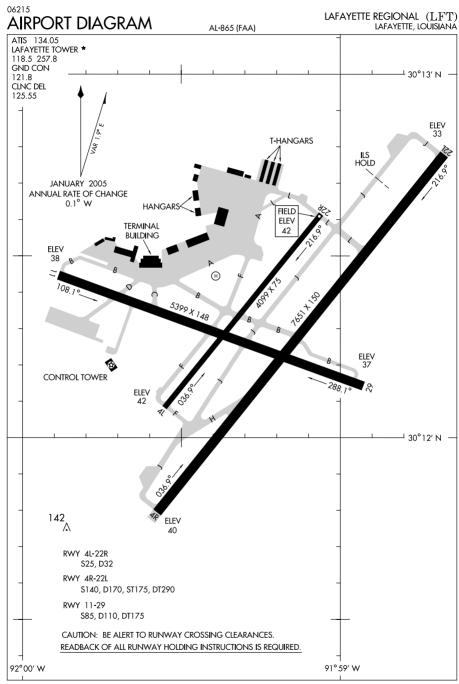




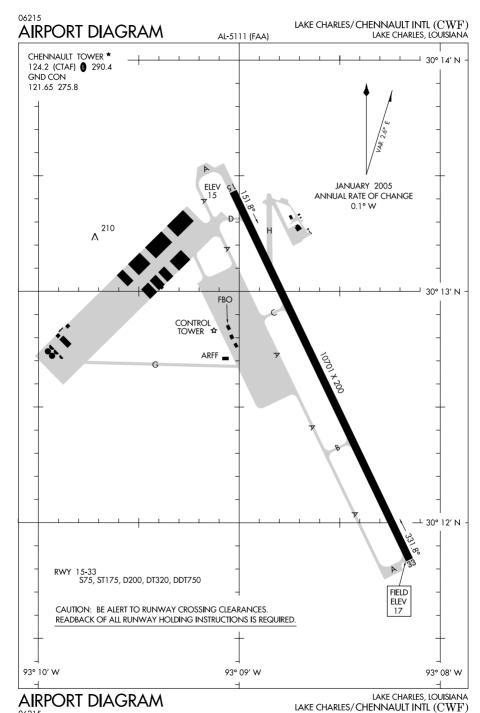
SC, 23 NOV 2006 to 18 JAN 2007



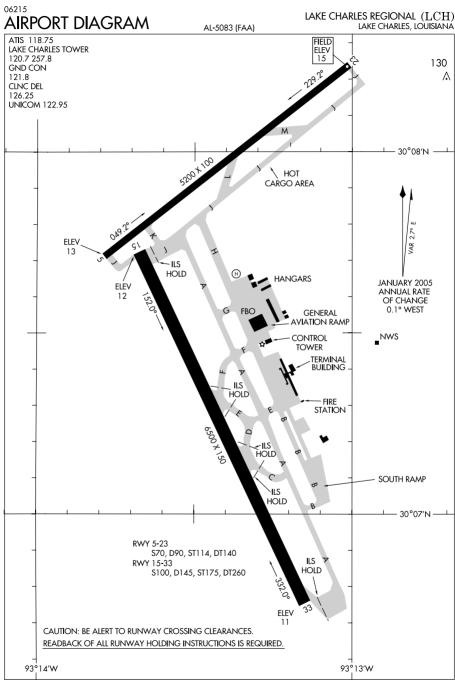
LACKLAND AFB (KELLY FLD ANNEX) (KSKF)



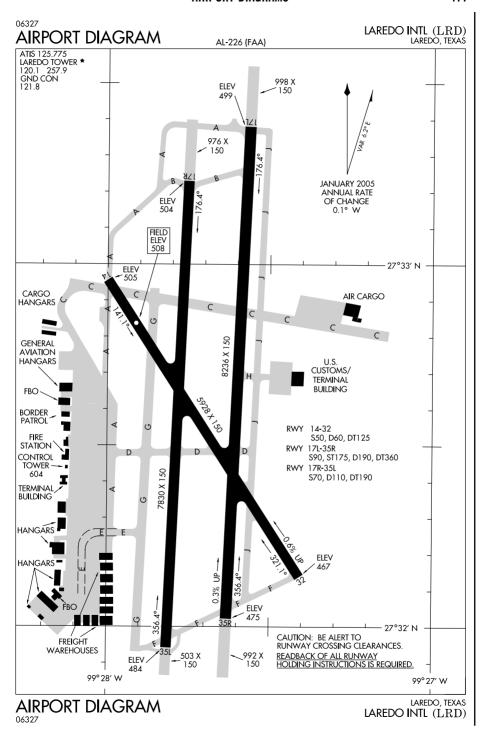
LAFAYETTE, LOUISIANA LAFAYETTE REGIONAL (LFT)



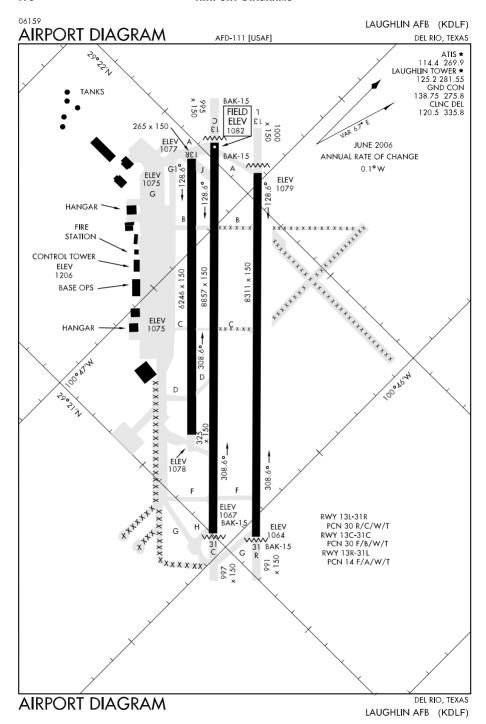
SC. 23 NOV 2006 to 18 JAN 2007

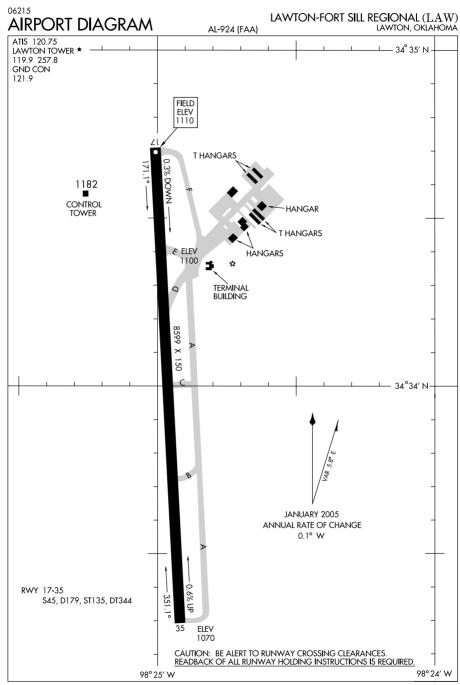


LAKE CHARLES, LOUISIANA LAKE CHARLES REGIONAL (LCH)

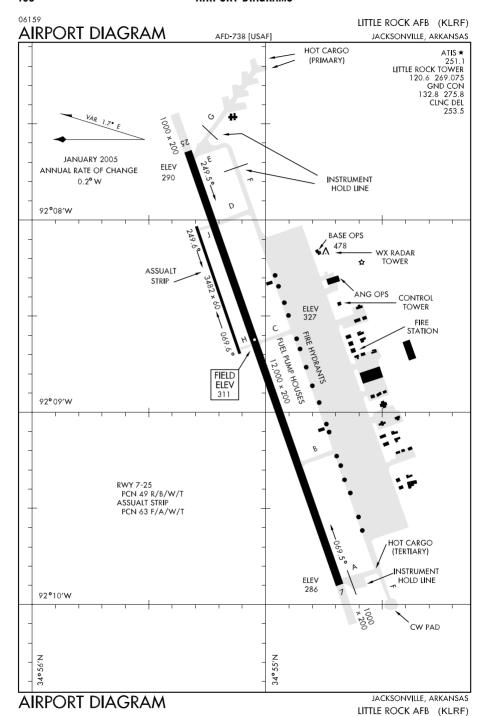


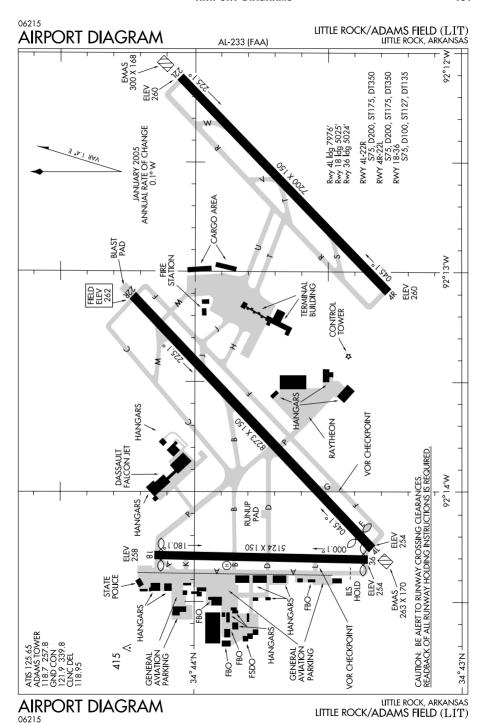
SC. 23 NOV 2006 to 18 JAN 2007



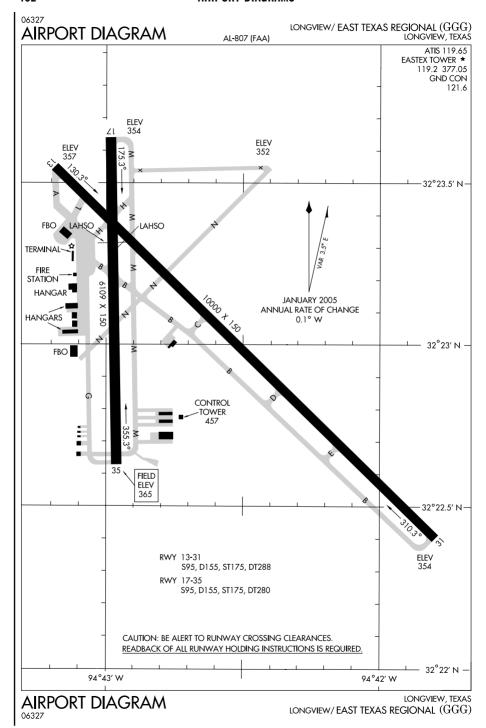


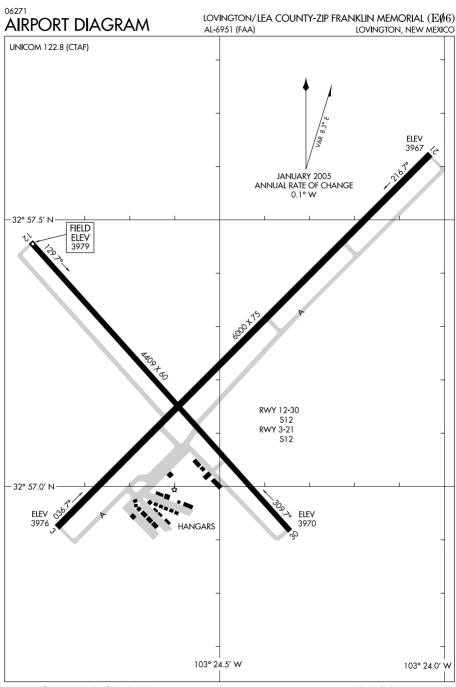
LAWTON, OKLAHOMA LAWTON-FORT SILL REGIONAL $(LAW)\,$



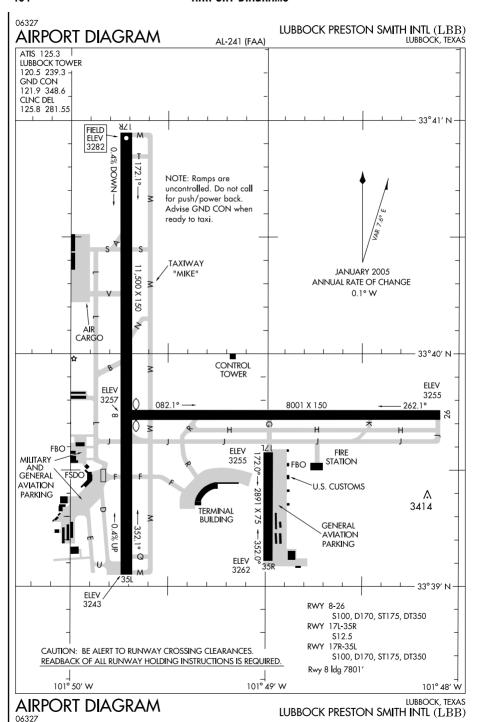


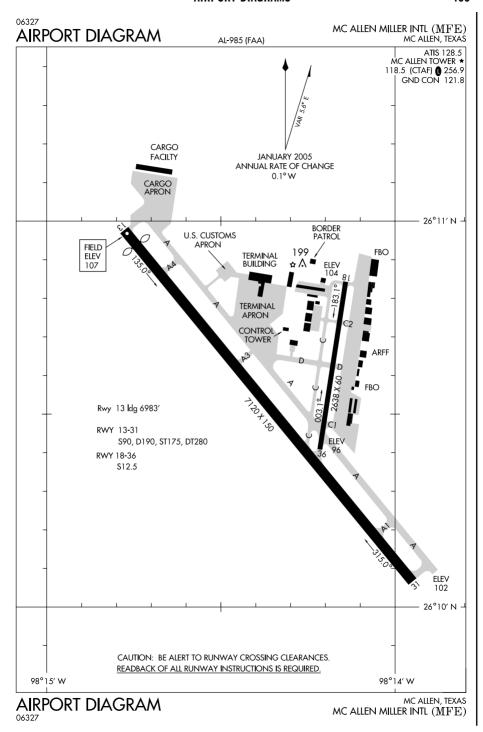
SC. 23 NOV 2006 to 18 JAN 2007

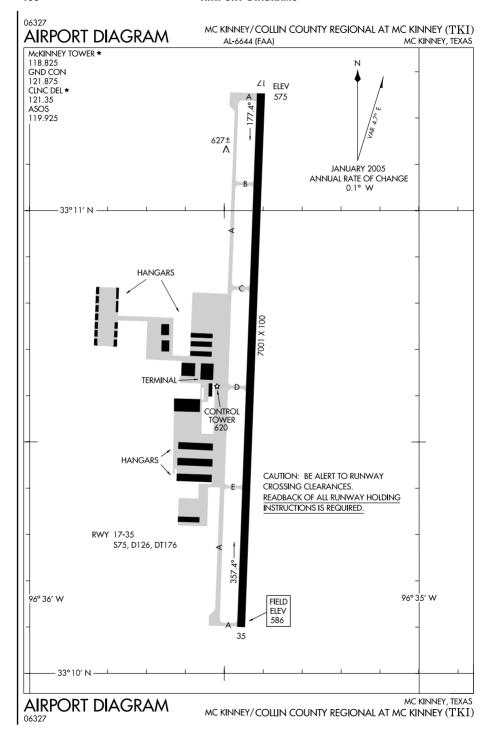




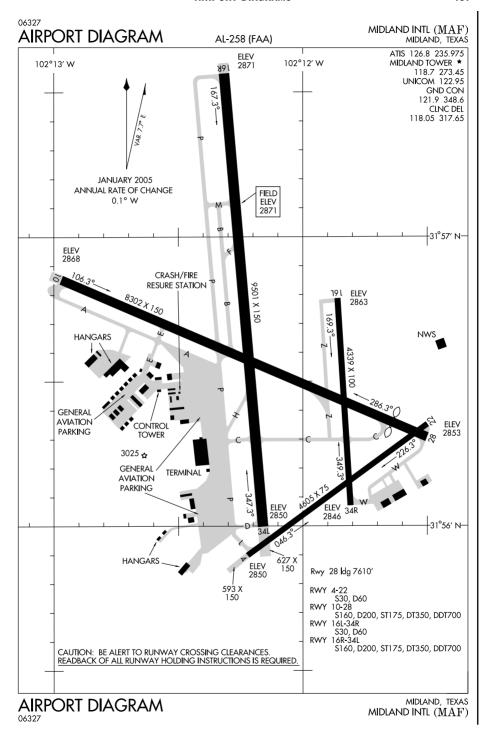
LOVINGTON, NEW MEXICO LOVINGTON/ LEA COUNTY-ZIP FRANKLIN MEMORIAL $(E\emptyset 6)$

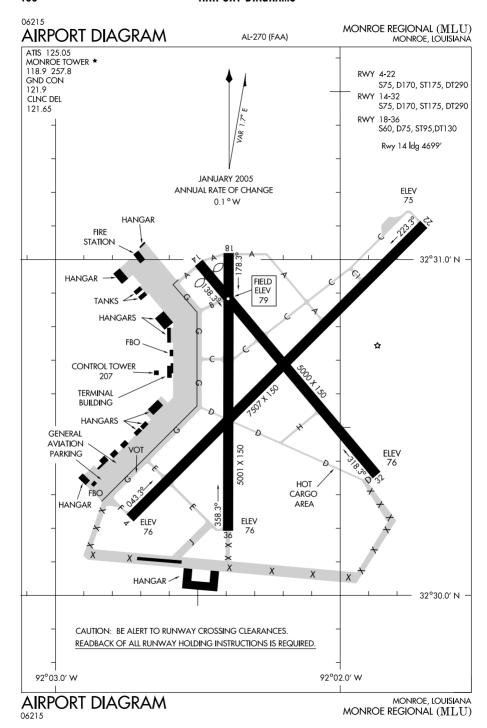


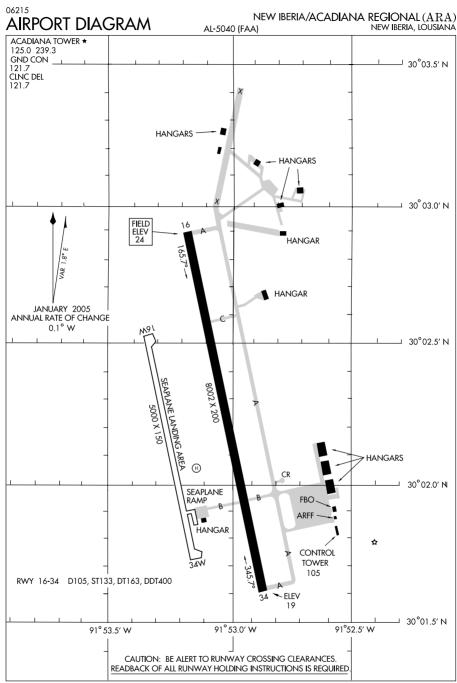




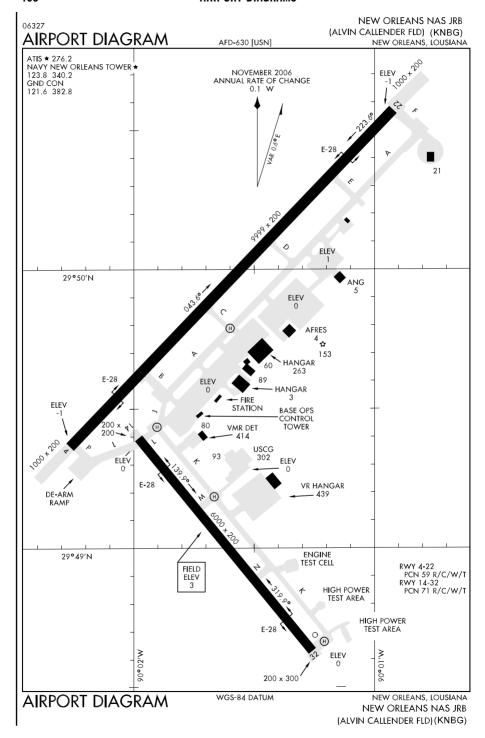
SC, 23 NOV 2006 to 18 JAN 2007



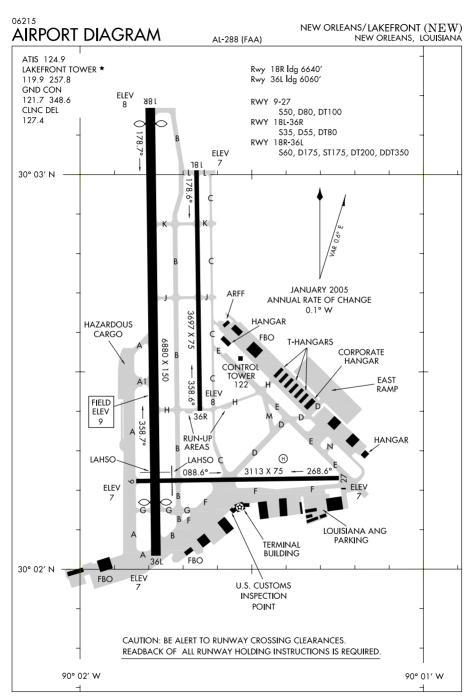




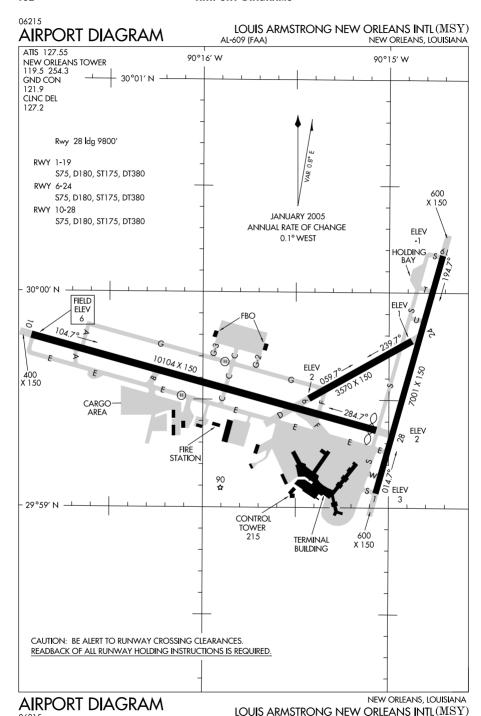
NEW IBERIA/ACADIANA REGIONAL (ARA)



SC. 23 NOV 2006 to 18 JAN 2007



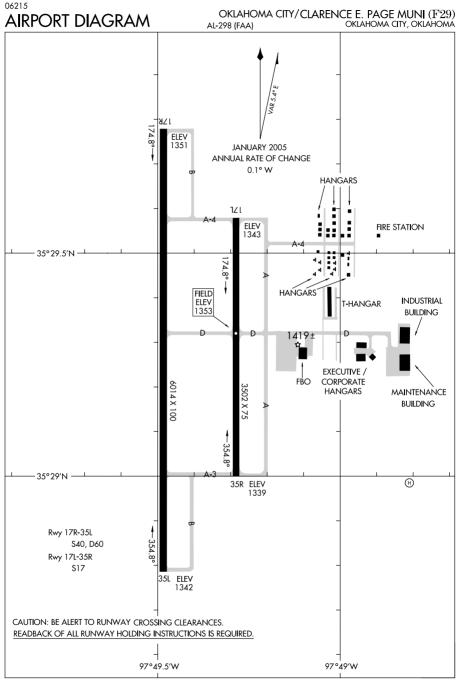
NEW ORLEANS, LOUISIANA NEW ORLEANS/ LAKEFRONT $(N\! \, E \! \, W)$



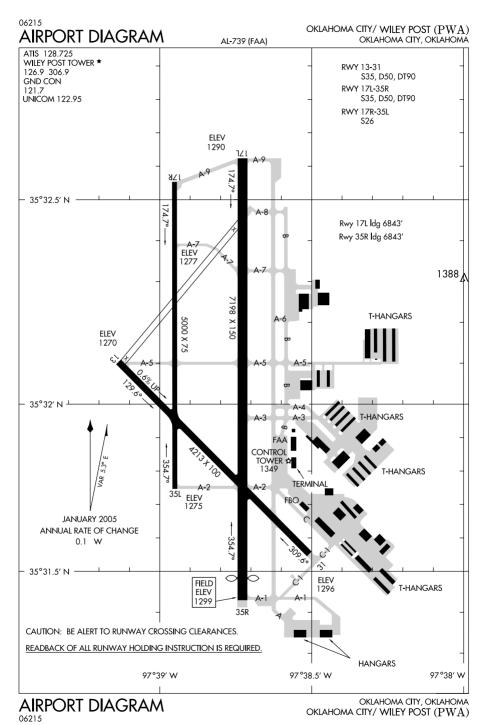
SC. 23 NOV 2006 to 18 JAN 2007

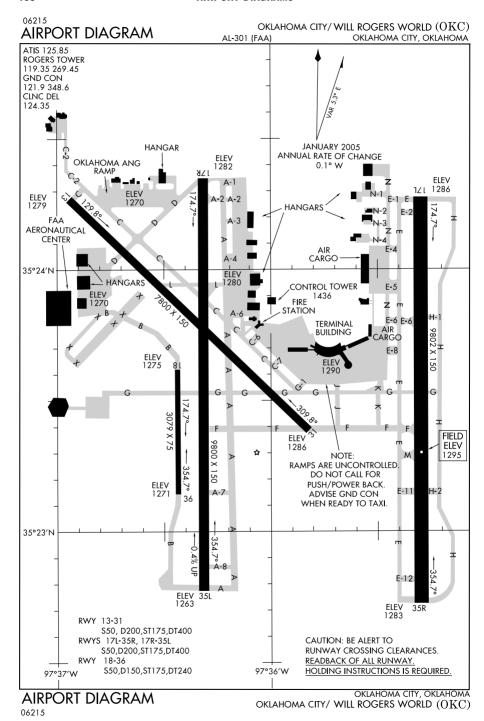
06215 NORMAN/UNIVERSITY OF OKLAHOMA WESTHEIMER (OUN)AIRPORT DIAGRAM NORMAN, OKLAHOMÁ AL-5672 (FAA) WESTHEIMER TOWER ★ 118.0 GND CON 121.6 ELEV Zl 1181 5200 X 100 JANUARY 2005 ANNUAL RATE OF CHANGE 0.1°W C-1 **FIELD ELEV** 1182 ELEV 1179 **HANGARS** 354.5 ELEV 1177 HANGAR 1315 🛦 TERMINAL BUILDING/ CONTROL TOWER/FBO **ELEV** RWY 3-21 S30, D50, DT100 RWY 17-35 CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. S30, D50, DT100 READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED – 35°14′N – 97° 28'W 97° 29'W AIRPORT DIAGRAM NORMAN, OKLAHOMA

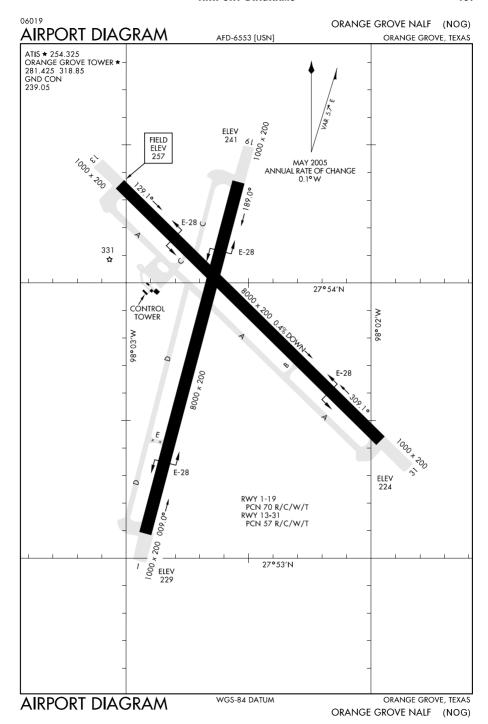
NORMAN/ UNIVERSITY OF OKLAHOMA WESTHEIMER (OUN)

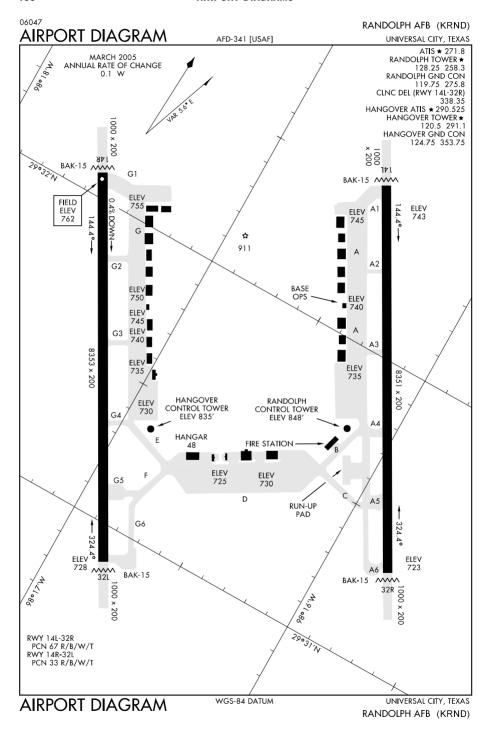


oklahoma city, oklahoma city, oklahoma city/ clarence e. page muni (F29)

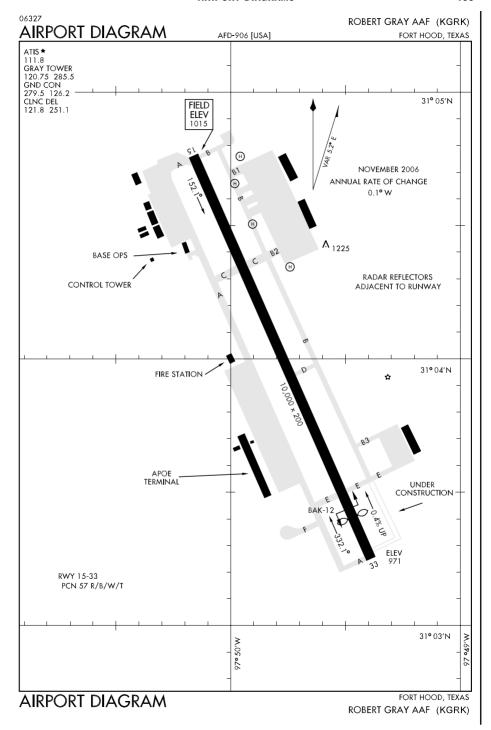


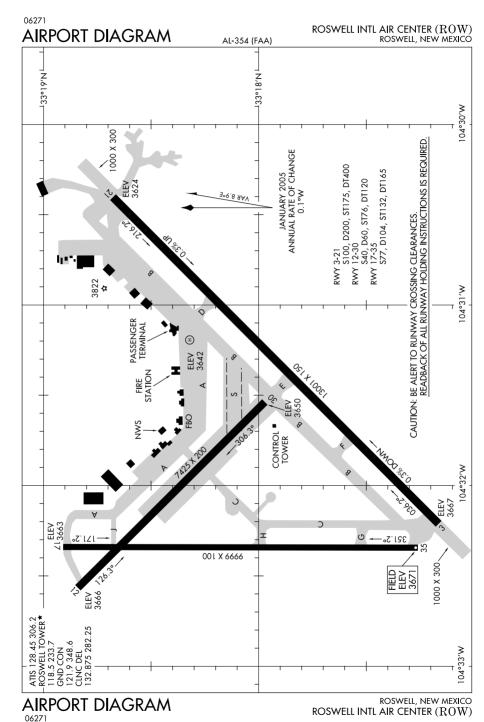




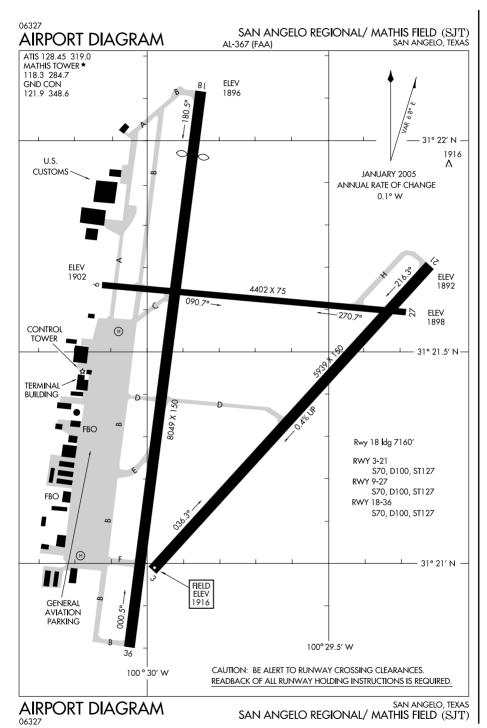


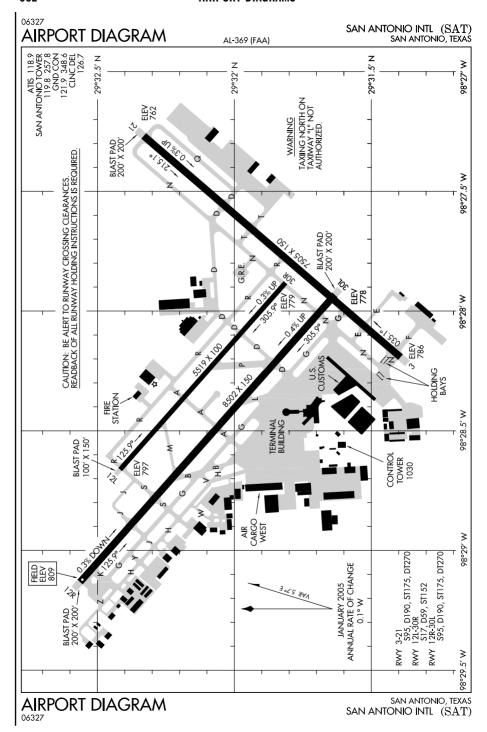
SC, 23 NOV 2006 to 18 JAN 2007



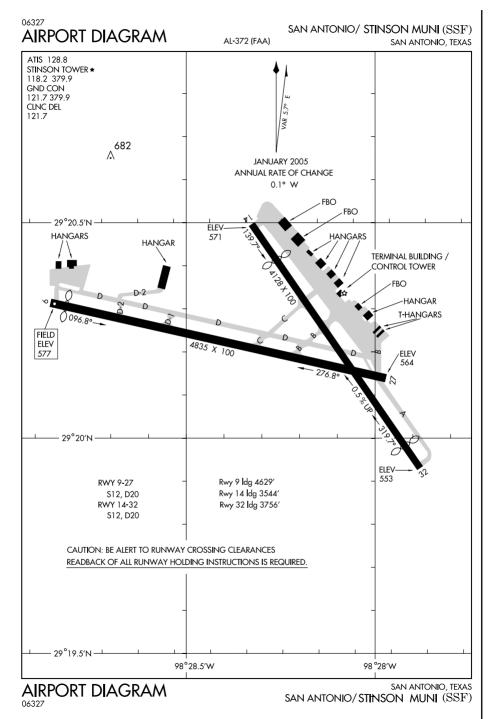


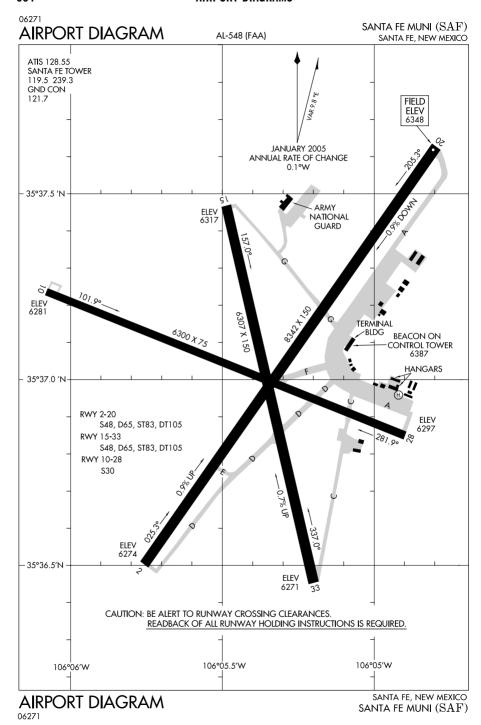
SC, 23 NOV 2006 to 18 JAN 2007

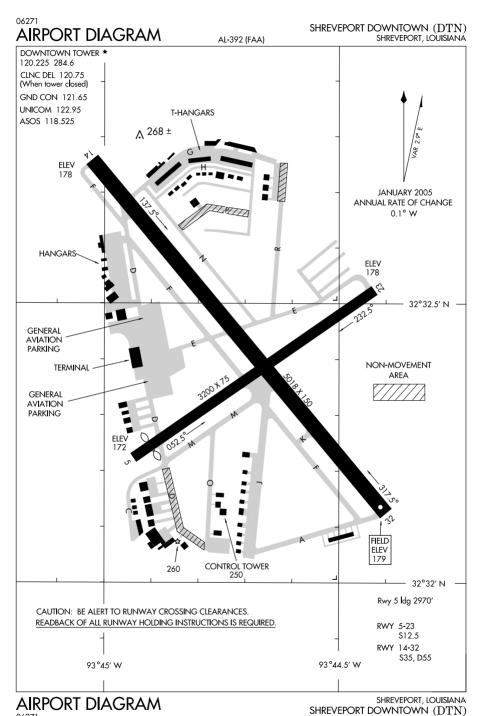


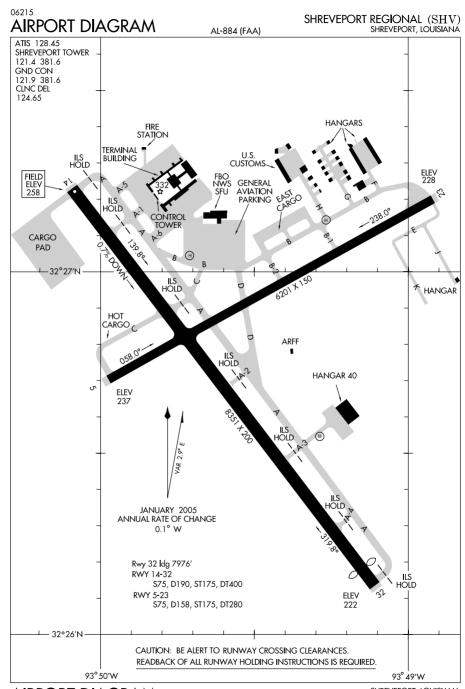


SC, 23 NOV 2006 to 18 JAN 2007









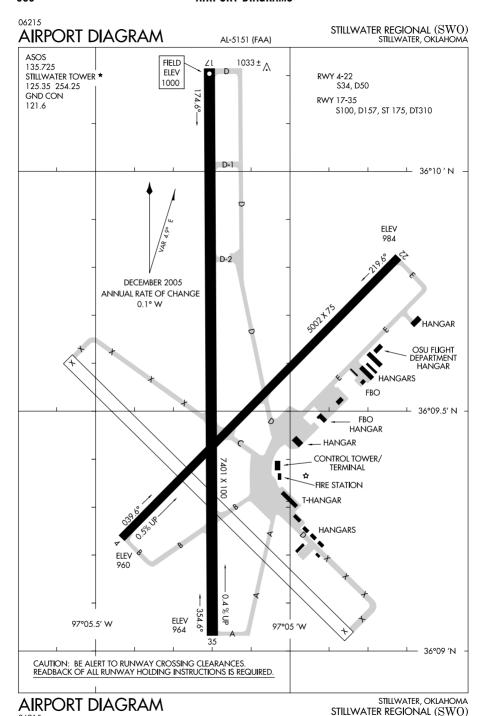
AIRPORT DIAGRAM

SHREVEPORT REGIONAL (SHV)

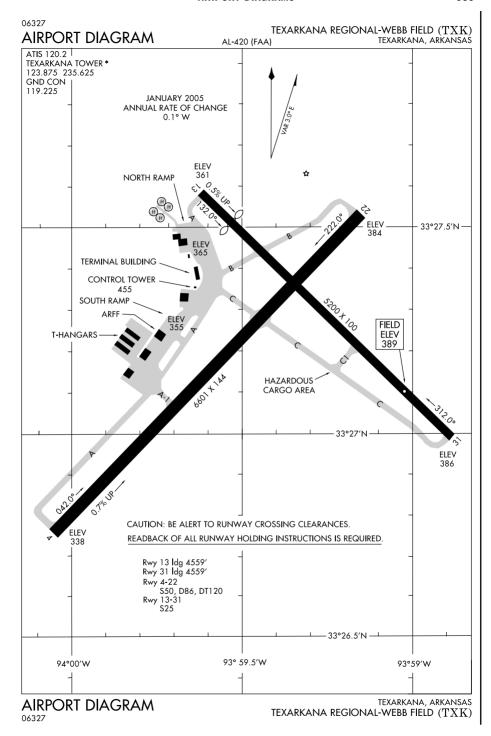
06215 SPRINGDALE MUNI (ASG) AIRPORT DIAGRAM SPRINGDALE, ARKANSAS AL-5165 (FAA) AWOS-3 124.675 SPRINGDALE TOWER* 118.2 GND CON 121.6 94°07′.5"W 94°07′W 81 ELEV 1339 <u> </u> 11′N — 36°11′N — HAZARDOUS CARGO JANUARY 2005 ANNUAL RATE OF CHANGE HANGARS **HANGARS** 36°10′.5"N [⊥] HANGARS **TERMINAL** CONTROL 5302 X 75 **TOWER** 1436 **HANGARS** \oplus HANGARS **HANGARS** FIELD Rwy 18-36 \$35, D50, DT90 **ELEV** 1353 ±36°10′N± CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

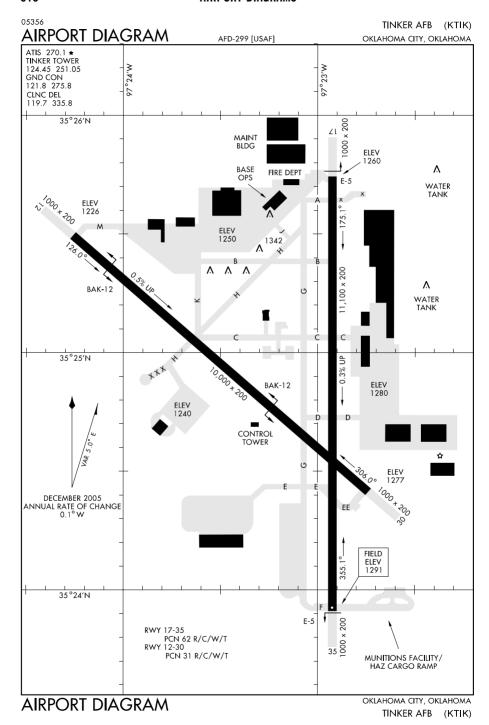
SPRINGDALE, ARKANSAS SPRINGDALE MUNI $\left(ASG\right)$

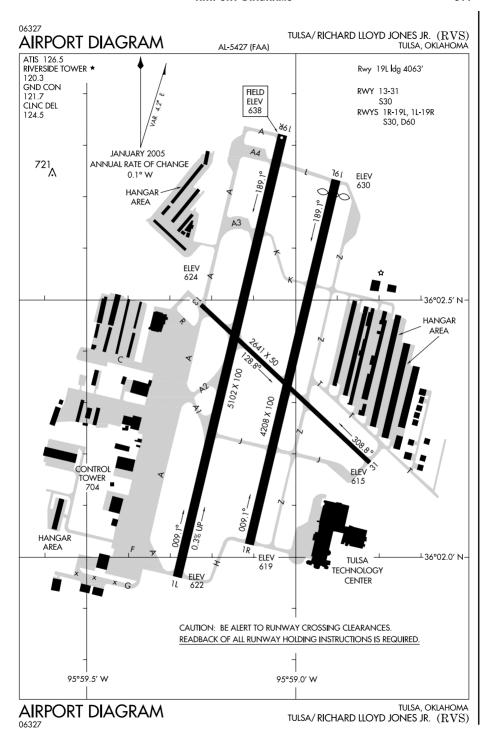


SC, 23 NOV 2006 to 18 JAN 2007



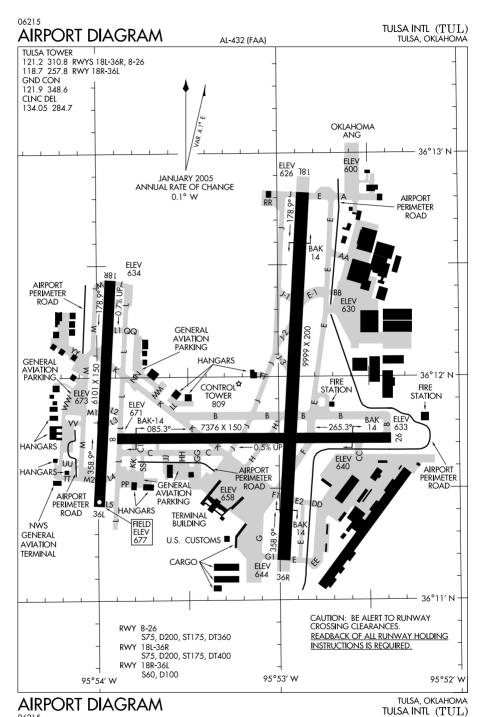
SC. 23 NOV 2006 to 18 JAN 2007



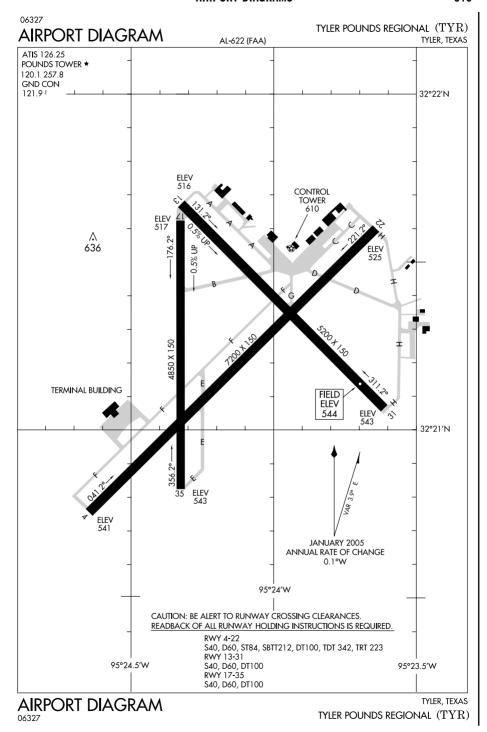


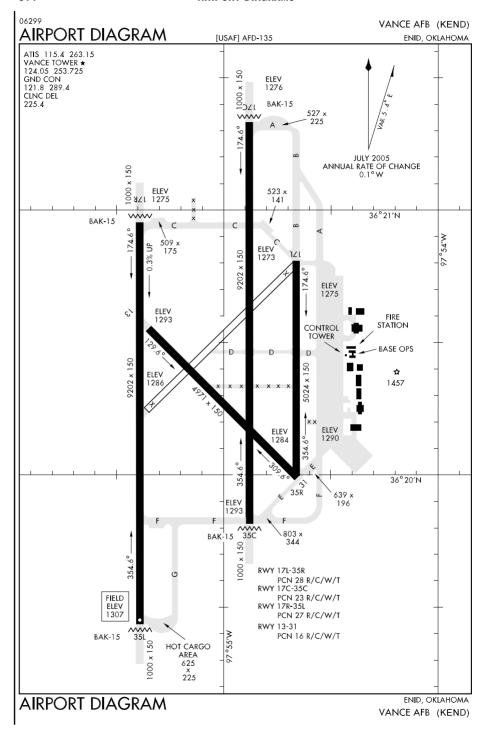
SC. 23 NOV 2006 to 18 JAN 2007

06215

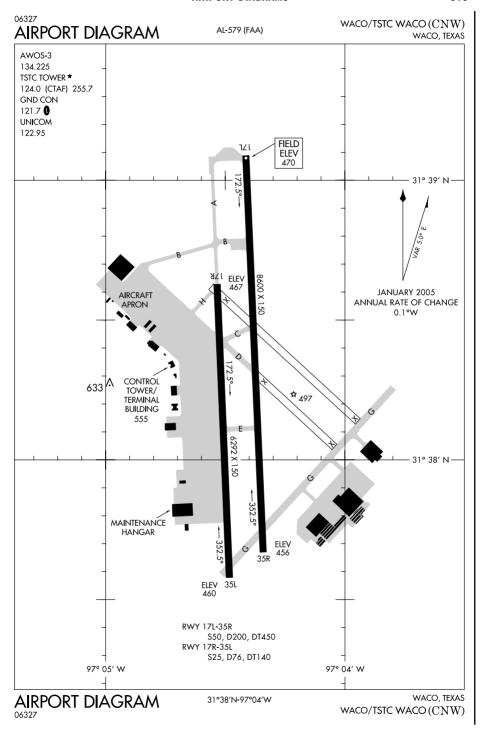


SC. 23 NOV 2006 to 18 JAN 2007

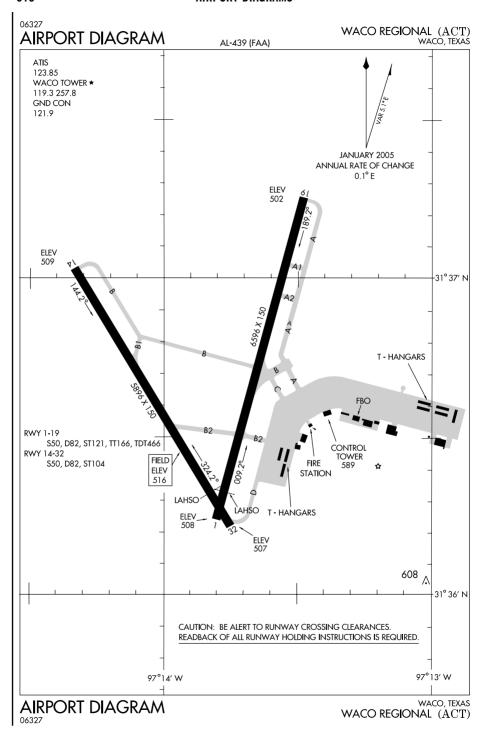




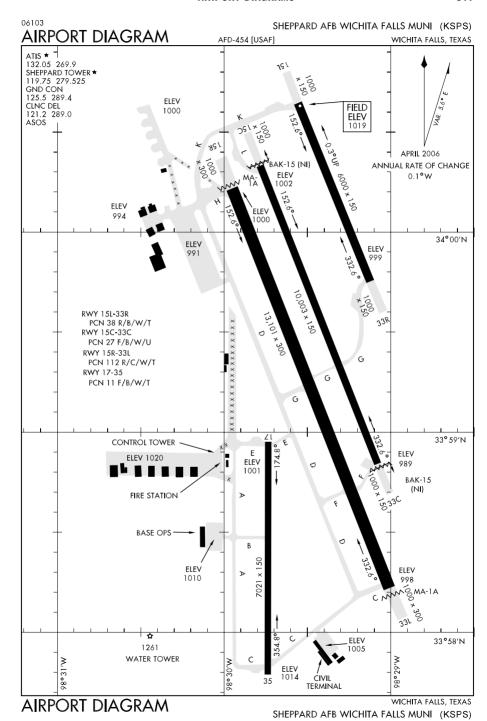
SC, 23 NOV 2006 to 18 JAN 2007



SC, 23 NOV 2006 to 18 JAN 2007



SC, 23 NOV 2006 to 18 JAN 2007



INTENTIONALLY LEFT BLANK

INTENTIONALLY LEFT BLANK

